

10/086,515

0.21

FILE 'HOME' ENTERED AT 14:45:57 ON 16 JUN 2003

=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

ENTRY SE 0.21

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 15 JUN 2003 HIGHEST RN 531490-82-1 DICTIONARY FILE UPDATES: 15 JUN 2003 HIGHEST RN 531490-82-1

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

\*\*\* YOU HAVE NEW MAIL \*\*\*

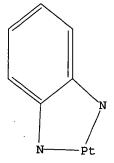
=> Uploading 10086515.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss SAMPLE SEARCH INITIATED 14:46:34 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 441 TO ITERATE 100.0% PROCESSED 441 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.04

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 7561 TO 10079 PROJECTED ANSWERS: 1316 TO 2484

L2 50 SEA SSS SAM L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.40 0.61

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FILE COVERS 1907 - 16 Jun 2003 VOL 138 ISS 25 FILE LAST UPDATED: 15 Jun 2003 (20030615/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

\*\*\* YOU HAVE NEW MAIL \*\*\*

=> s 12

L3 29 L2

=> s 13 and label

50966 LABEL

L4 0 L3 AND LABEL

=> s 13 and marker

94209 MARKER

L5 0 L3 AND MARKER

=> file reg

COST IN U.S. DOLLARS

SINCE FILE ENTRY SESSION 5.31

TOTAL

50 ANSWERS

FULL ESTIMATED COST 4.70

FILE 'REGISTRY' ENTERED AT 14:48:32 ON 16 JUN 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 15 JUN 2003 HIGHEST RN 531490-82-1 DICTIONARY FILE UPDATES: 15 JUN 2003 HIGHEST RN 531490-82-1

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

\*\*\* YOU HAVE NEW MAIL \*\*\*

=> Uploading 10086515.str

L6 STRUCTURE UPLOADED

=> s 16 full FULL SEARCH INITIATED 14:48:50 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 9043 TO ITERATE

100.0% PROCESSED 9043 ITERATIONS SEARCH TIME: 00.00.01

1921 ANSWERS

L7 1921 SEA SSS FUL L6

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 148.15 153.46

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 14:48:57 ON 16 JUN 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 16 Jun 2003 VOL 138 ISS 25 FILE LAST UPDATED: 15 Jun 2003 (20030615/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
09567863
=> s 17
L8
           515 L7
=> s 18 and label
         50966 LABEL
             1 L8 AND LABEL
1.9
=> d 19 bib abs
     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
1.9
     1978:7538 CAPLUS
AN
     88:7538
DN
     Interaction of cis platinum(II) compounds with poly(L-glutamate). A
ТT
```

doubly anchored spin-label and a doubly anchored chromophore-

Chao, Yen Yau H.; Holtzer, Alfred; Mastin, Stephen H. ΑU Dep. Chem., Washington Univ., St. Louis, MO, USA CS

Journal of the American Chemical Society (1977), 99(24), 8024-32 SO CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

AB

The free-radical 4-amino-2,2,6,6-tetramethylpiperidinyl-1-oxy [14691-88-4] yields cis-Pt(ATMPO)2(NO3)2 [64716-94-5], which is used to label poly(L-glutamate) (I), poly(L-aspartate) (II), and poly(L-lysine) (III). Labeling occurs by displacement of nitrate by polymer side chains. EPR spectra of oriented films of labeled I are strongly anisotropic; several arguments suggest that the major cause is g anisotropy. Spectra of solns., in several solvents, of labeled I are also anisotropic and monitor the helix-coil transition and polymer aggregation. Since monofunctional, side-chain labels show only isotropic motions, Pt must be bifunctionally anchored to adjacent carboxylates, requiring the label to follow backbone segmental motions. With shorter side chains (II) adjacent double anchoring is impossible; with longer side chains (III), flexibility reduces coupling to backbone motion; in each, therefore, spectra are isotropic. Chromophoric compds., particularly cis-Pt(bipy)(H2O)2][NO3]2 [64800-95-9], are similarly used. Bifunctional attachment is evidenced by the absence of base-induced UV spectral shifts (characteristic of attachment of OH- to Pt) shown by label alone, and by similarity of the spectra of labeled polymer and labeled oxalate. Induced CD appears for .alpha. helix in the region of the chromophore .pi.-.pi.\* bands; transition to random coil drastically reduces this CD. With extensively labeled polymer differences in the course of the helix-coil transition as monitored by CD in the backbone region with that monitored in the chromophore region show that the label stabilizes its attached helical residue. A study of Corey-Pauling-Koltun models and extant theories suggests that the induced CD arises by coupling of the carboxylate .pi.-.pi.\* and the bound chromophore 1B1 elec. transition moments.

```
=> d 19 bib abs hitstr
```

```
L9
    ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
```

AN 1978:7538 CAPLUS

DN 88:7538

ΤI Interaction of cis platinum(II) compounds with poly(L-glutamate). A doubly anchored spin-label and a doubly anchored chromophore-

ΑU Chao, Yen Yau H.; Holtzer, Alfred; Mastin, Stephen H.

CS Dep. Chem., Washington Univ., St. Louis, MO, USA

SO Journal of the American Chemical Society (1977), 99(24), 8024-32 CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

AB The free-radical 4-amino-2,2,6,6-tetramethylpiperidinyl-1-oxy [14691-88-4] yields cis-Pt(ATMPO)2(NO3)2 [64716-94-5], which is used to label poly(L-glutamate) (I), poly(L-aspartate) (II), and poly(L-lysine) (III). Labeling occurs by displacement of nitrate by polymer side chains. EPR spectra of oriented films of labeled I are strongly anisotropic; several arguments suggest that the major cause is g anisotropy. Spectra of solns., in several solvents, of labeled I are also anisotropic and monitor the helix-coil transition and polymer aggregation. Since monofunctional, side-chain labels show only isotropic motions, Pt must be bifunctionally anchored to adjacent carboxylates, requiring the label to follow backbone segmental motions. With shorter side chains (II) adjacent double anchoring is impossible; with longer side chains (III), flexibility reduces coupling to backbone motion; in each, therefore, spectra are isotropic. Chromophoric compds., particularly cis-Pt(bipy)(H2O)2][NO3]2 [64800-95-9], are similarly used. Bifunctional attachment is evidenced by the absence of base-induced UV spectral shifts (characteristic of attachment of OH- to Pt) shown by label alone, and by similarity of the spectra of labeled polymer and labeled oxalate. Induced CD appears for .alpha. helix in the region of the chromophore .pi.-.pi.\* bands; transition to random coil drastically reduces this CD. With extensively labeled polymer differences in the course of the helix-coil transition as monitored by CD in the backbone region with that monitored in the chromophore region show that the label stabilizes its attached helical residue. A study of Corey-Pauling-Koltun models and extant theories suggests that the induced CD arises by coupling of the carboxylate .pi.-.pi.\* and the bound chromophore 1B1 elec. transition moments.

IT 64738-77-8D, reaction products with poly(glutamic acid)
RL: PRP (Properties)

(CD spectra of, chain segmental motion in relation to)

RN 64738-77-8 CAPLUS

CN Platinum(2+), diaqua(1,10-phenanthroline-N1,N10)-, (SP-4-2)-, dinitrate (9CI) (CA INDEX NAME)

CM 1

CRN 64738-76-7 CMF C12 H12 N2 O2 Pt CCI CCS

$$N \longrightarrow Pt^{2+} OH_2$$

CM 2

CRN 14797-55-8 CMF N O3

IT 64738-77-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction with poly(glutamic acid))

RN 64738-77-8 CAPLUS

CN Platinum(2+), diaqua(1,10-phenanthroline-N1,N10)-, (SP-4-2)-, dinitrate (9CI) (CA INDEX NAME)

CM 1

CRN 64738-76-7

CMF C12 H12 N2 O2 Pt

CCI CCS

$$\begin{array}{c|c} & & & \\ & N & & \\ & & Pt \\ & & OH_2 \end{array}$$

CM 2

CRN 14797-55-8 CMF N O3

IT 64738-79-0

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with silver nitrate)

RN 64738-79-0 CAPLUS

CN Platinum(2+), diaqua(1,10-phenanthroline-N1,N10)-, dichloride, (SP-4-2)- (9CI) (CA INDEX NAME)

O<sub>2</sub> c<sub>1</sub>-

=> s 18 and marker

94209 MARKER

L10 0 L8 AND MARKER

=> s 18 and nucleic acid

142357 NUCLEIC

3655138 ACID

100018 NUCLEIC ACID

(NUCLEIC (W) ACID)

L11 4 L8 AND NUCLEIC ACID

=> d l11 bib abs 1-4

L11 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS

AN 2003:214952 CAPLUS

DN 138:234410

TI DNA chip, and assay method

IN Yamana, Kazunari; Kumamoto, Satoshi; Hasegawa, Tetsuya; Nakano, Hidehiko; Matsuo, Yoshiaki; Sugie, Tasohiro

PA JSR Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		<b>-</b>			
ΡI	JP 2003083968	A2	20030319	JP 2001-280137	20010914
PRAI	JP 2001-280137		20010914		

AB A DNA chip with a high detection sensitivity and a low noise is provided, with which the time for inserting an intercalator is shortened, and DNA is stably detected within a short time. The DNA chip is characterized in that it possesses an electrode carrying an immobilized DNA probe bound

with an intercalator.

L11 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS

AN 1985:55556 CAPLUS

DN 102:55556

TI Structure of a novel drug-nucleic acid crystalline complex: 1,10-phenanthroline-platinum(II) ethylenediamine-5'-phosphoryl-thymidylyl(3'-5') deoxyadenosine

AU Vijay-Kumar, Senadhi; Sakore, T. D.; Sobell, Henry M.

CS Sch. Med. Dent., Univ. Rochester, Rochester, NY, 14642, USA

SO Journal of Biomolecular Structure & Dynamics (1984), 2(2), 333-44

CODEN: JBSDD6; ISSN: 0739-1102

DT Journal LA English

GI

1,10-Phenanthroline-platinum (II) ethylenediamine (PEPt)(I) **54831-91-3**] forms a 1,2 cryst. complex [**94425-63-5**] with 5'-phosphorylthymidylyl (3'-5') deoxyadenosine ammonium salt (d-pTpA)(II) [94075-14-6]. Crystals are monoclinic, P21, with a = 10.204 .ANG., b= 24.743 .ANG., c = 21.064 .ANG., .beta. = 94.6.degree.. The structure has been detd. by Patterson and Fourier methods, and refined by least squares to a residual of 0.128 and 2,367 obsd. reflections. PEPt mols. form sandwich-like stacks with adenine-thymine hydrogen-bonded pairs along the a axis. Intercalation in the classic sense is not obsd. in this structure. Instead, d-pTpA mols. form an open chain structure in which adenine-thymine residues hydrogen-bond together with the reversed Hoogsteen type base-pairing configuration. Deoxyadenosine residues exist in the syn conformation and are C3' endo and C1' exo. Thymidine residues are in the high anti conformation with C2' endo puckers. The structure is heavily hydrated, forming a channel-like water network along the a axis. Other features of the structure are described. The relation of these results to drug binding of nucleic acids is discussed.

II

L11 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS

AN 1980:438214 CAPLUS

DN 93:38214

TI Inhibitory studies of DNA, RNA and protein synthesis in Escherichia coli by platinum containing complexes

AU Kohl, H. H.; Haghighi, Saeid; McAuliffe, C. A.

CS Dep. Chem., Auburn Univ., Auburn, AL, USA

SO Chemico-Biological Interactions (1980), 29(3), 327-33 CODEN: CBINA8; ISSN: 0009-2797

DT Journal

LA English

AB The inhibitory effectiveness of a no. of recently synthesized Pt compds. is compared toward the inhibition of the synthesis of DNA, RNA, and protein in E. coli. Some of these new derivs. were nearly 3-fold more potent than cis-diamminedichloroplatinum(II) [15663-27-1] and trans-diamminedichloroplatinum(II) [14913-33-8].

```
ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS
AN
    1973:400207 CAPLUS
DN
    79:207
    Antitumor action of dichloro (4,5-dimethyl-o-phenylenediamine) platinum (II)
ΤI
    Gale, Glen R.; Atkins, Loretta M.; Walker, Ernest M., Jr.; Smith, Alayne
ΑU
    B.; Meischen, Sandra J.
CS
    Veterans Adm. Hosp., Charleston, SC, USA
    Proceedings of the Society for Experimental Biology and Medicine (1973),
SO
     142(4), 1349-54
     CODEN: PSEBAA; ISSN: 0037-9727
DT
    Journal
    English
LA
AΒ
    Dichloro(4,5-dimethyl-o-phenylenediamine-N,N')platinum (I) [
     40580-75-4] was synthesized by the reaction of
     4,5-dimethyl-o-phenylenediamine [3171-45-7] with potassium
     tetrachloroplatinate [10025-99-7]. I increased the survival times of
     Ehrlich ascites tumor- and L 1210 leukemia-bearing mice by 176% and 74%
    resp. I at approx. 4x10-5M concn. caused a 50% inhibition of DNA, RNA and
    protein synthesis in Ehrlich ascites tumor cells grown in vitro.
=> d l11 bib abs hitstr 1-4
    ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS
L11
     2003:214952 CAPLUS
AN
DN
    138:234410
    DNA chip, and assay method
TI
    Yamana, Kazunari; Kumamoto, Satoshi; Hasegawa, Tetsuya; Nakano, Hidehiko;
IN
    Matsuo, Yoshiaki; Sugie, Tasohiro
     JSR Ltd., Japan
PΑ
SO
     Jpn. Kokai Tokkyo Koho, 7 pp.
     CODEN: JKXXAF
DT
    Patent
LA
    Japanese
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
     _____
                           -----
PΙ
    JP 2003083968
                      A2
                           20030319
                                          JP 2001-280137 20010914
PRAI JP 2001-280137
                           20010914
    A DNA chip with a high detection sensitivity and a low noise is provided,
     with which the time for inserting an intercalator is shortened, and DNA is
     stably detected within a short time. The DNA chip is characterized in
     that it possesses an electrode carrying an immobilized DNA probe bound
    with an intercalator.
     501915-00-0
IT
    RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (DNA chip, and assay method)
     501915-00-0 CAPLUS
RN
CN
     Platinum(4+), tris(1,10-phenanthroline-.kappa.N1,.kappa.N10)-, (OC-6-11)-
     (9CI) (CA INDEX NAME)
```

L11 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS

AN 1985:55556 CAPLUS

DN 102:55556

TI Structure of a novel drug-nucleic acid crystalline complex: 1,10-phenanthroline-platinum(II) ethylenediamine-5'-phosphoryl-thymidylyl(3'-5') deoxyadenosine

AU Vijay-Kumar, Senadhi; Sakore, T. D.; Sobell, Henry M.

CS Sch. Med. Dent., Univ. Rochester, Rochester, NY, 14642, USA

SO Journal of Biomolecular Structure & Dynamics (1984), 2(2), 333-44 CODEN: JBSDD6; ISSN: 0739-1102

DT Journal

LA English

GI

AB 1,10-Phenanthroline-platinum (II) ethylenediamine (PEPt)(I) [
54831-91-3] forms a 1,2 cryst. complex [94425-63-5]
with 5'-phosphorylthymidylyl (3'-5') deoxyadenosine ammonium salt
(d-pTpA)(II) [94075-14-6]. Crystals are monoclinic, P21, with a = 10.204
.ANG., b= 24.743 .ANG., c = 21.064 .ANG., .beta. = 94.6.degree.. The
structure has been detd. by Patterson and Fourier methods, and refined by
least squares to a residual of 0.128 and 2,367 obsd. reflections. PEPt
mols. form sandwich-like stacks with adenine-thymine hydrogen-bonded pairs
along the a axis. Intercalation in the classic sense is not obsd. in this
structure. Instead, d-pTpA mols. form an open chain structure in which
adenine-thymine residues hydrogen-bond together with the reversed

II

Hoogsteen type base-pairing configuration. Deoxyadenosine residues exist in the syn conformation and are C3' endo and C1' exo. Thymidine residues are in the high anti conformation with C2' endo puckers. The structure is heavily hydrated, forming a channel-like water network along the a axis. Other features of the structure are described. The relation of these results to drug binding of nucleic acids is discussed.

IT 94425-63-5

RL: FORM (Formation, nonpreparative)
 (formation of)

RN 94425-63-5 CAPLUS

CN Adenosine, 5'-O-phosphonothymidylyl-(3'.fwdarw.5')-2'-deoxy-, ion(1-), (SP-4-2)-(1,2-ethanediamine-.kappa.N,.kappa.N')(1,10-phenanthroline-.kappa.N1,.kappa.N10)platinum(2+) (2:1), diammonium salt, hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 94425-62-4 CMF C20 H26 N7 O13 P2 . 1/2 C14 H16 N4 Pt

CM 2

CRN 94425-61-3 CMF C20 H26 N7 O13 P2

Absolute stereochemistry.

CM 3

CRN 54831-91-3 CMF C14 H16 N4 Pt CCI CCS

IT 54831-91-3

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with phosphorylthymidylyl deoxyadenosine)

RN 54831-91-3 CAPLUS

CN Platinum(2+), (1,2-ethanediamine-.kappa.N,.kappa.N')(1,10-phenanthroline-.kappa.N1,.kappa.N10)-, (SP-4-2)- (9CI) (CA INDEX NAME)

L11 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS

AN 1980:438214 CAPLUS

DN 93:38214

TI Inhibitory studies of DNA, RNA and protein synthesis in Escherichia coli by platinum containing complexes

AU Kohl, H. H.; Haghighi, Saeid; McAuliffe, C. A.

CS Dep. Chem., Auburn Univ., Auburn, AL, USA

SO Chemico-Biological Interactions (1980), 29(3), 327-33 CODEN: CBINA8; ISSN: 0009-2797

DT Journal

LA English

AB The inhibitory effectiveness of a no. of recently synthesized Pt compds. is compared toward the inhibition of the synthesis of DNA, RNA, and protein in E. coli. Some of these new derivs. were nearly 3-fold more potent than cis-diamminedichloroplatinum(II) [15663-27-1] and trans-diamminedichloroplatinum(II) [14913-33-8].

IT 38780-39-1 65525-41-9

RL: PRP (Properties)

(nucleic acid and protein formation inhibition by, in Escherichia coli)

RN 38780-39-1 CAPLUS

CN Platinum, (1,2-benzenediamine-.kappa.N,.kappa.N')dichloro-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN 65525-41-9 CAPLUS

CN Platinum, (1,2-benzenediamine-.kappa.N,.kappa.N')diiodo-, (SP-4-2)- (9CI) (CA INDEX NAME)

L11 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS

AN 1973:400207 CAPLUS

DN 79:207

TI Antitumor action of dichloro(4,5-dimethyl-o-phenylenediamine)platinum(II)

AU Gale, Glen R.; Atkins, Loretta M.; Walker, Ernest M., Jr.; Smith, Alayne B.; Meischen, Sandra J.

CS Veterans Adm. Hosp., Charleston, SC, USA

SO Proceedings of the Society for Experimental Biology and Medicine (1973), 142(4), 1349-54

CODEN: PSEBAA; ISSN: 0037-9727

DT Journal

LA English

AB Dichloro(4,5-dimethyl-o-phenylenediamine-N,N')platinum (I) [
40580-75-4] was synthesized by the reaction of
4,5-dimethyl-o-phenylenediamine [3171-45-7] with potassium
tetrachloroplatinate [10025-99-7]. I increased the survival times of
Ehrlich ascites tumor- and L 1210 leukemia-bearing mice by 176% and 74%
resp. I at approx. 4x10-5M concn. caused a 50% inhibition of DNA, RNA and
protein synthesis in Ehrlich ascites tumor cells grown in vitro.

IT 40580-75-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(neoplasm inhibition by)

RN 40580-75-4 CAPLUS

CN Platinum, dichloro(4,5-dimethyl-1,2-benzenediamine-N,N')-, (SP-4-2)- (9CI) (CA INDEX NAME)

Me 
$$\frac{\text{H}_2}{\text{N}}$$
  $\frac{\text{C1}}{\text{Pt}}$   $\frac{2+}{\text{C1}}$   $\frac{2+}{\text{NH}_2}$ 

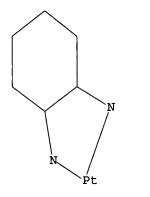
=>

Uploading 10086515.str

STRUCTURE UPLOADED L1

=> d l1 L1 HAS NO ANSWERS

L1STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full FULL SEARCH INITIATED 15:00:00 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 9043 TO ITERATE

100.0% PROCESSED 9043 ITERATIONS 4017 ANSWERS

SEARCH TIME: 00.00.01

4017 SEA SSS FUL L1 L2

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 148.36 FULL ESTIMATED COST 148.15

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FILE COVERS 1907 - 16 Jun 2003 VOL 138 ISS 25 FILE LAST UPDATED: 15 Jun 2003 (20030615/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s 12
L3
          1799 L2
=> s 13 and marker
         94209 MARKER
L4
           10 L3 AND MARKER
=> s 14 and nucleic acid
        142357 NUCLEIC
       3655138 ACID
        100018 NUCLEIC ACID
                 (NUCLEIC (W) ACID)
L5
             0 L4 AND NUCLEIC ACID
=> d l4 bib abs hitstr 1-10
T.4
     ANSWER 1 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN
     2003:252599 CAPLUS
DN
     138:382921
     Predictive markers for colorectal cancer: current status and future
TI
     prospects
     Longley, Daniel B.; McDermott, Ultan; Johnston, Patrick G.
ΑU
CS
     Department of Oncology, Cancer Research Centre, Queen's University
     Belfast, Ire.
SO
     Clinical Colorectal Cancer (2003), 2(4), 223-230
     CODEN: CCCLCF; ISSN: 1533-0028
PΒ
     Cancer Information Group
DT
     Journal; General Review
LA
     English
AB
     A review. Colorectal cancer (CRC) is the second leading cause of cancer
     death in the United States. Although there is clear evidence of the
     benefit of chemotherapy in adjuvant and metastatic settings, its use
     continues to be suboptimal because of intrinsic or acquired drug
     resistance. 5-Fluorouracil continues to be the mainstay of CRC therapy,
     and combinations with newer chemotherapeutic agents such as irinotecan and
     oxaliplatin have resulted in improved response rates and survival. The
     role of other agents including cyclooxygenase-2 inhibitors, epidermal
     growth factor receptor, and farnesyl transferase inhibitors remains to be
     elucidated. Despite these improvements, many patients undergo
     chemotherapy without benefit. Increased understanding of the biol. of CRC
     has led to the identification of prognostic markers that may help identify
     patients who will benefit from chemotherapy. Furthermore, studies have
     also begun to identify markers that predict whether a tumor will respond
     to a particular chemotherapy. The ultimate goal of this research is to
     prospectively identify patients who should receive chemotherapy and, thus,
     to tailor treatment to the mol. profile of the tumor and patient. Such an
     approach has the potential to dramatically improve response rates. This
     review highlights potentially important prognostic and predictive factors
     in CRC and discusses the potential for their use in the treatment of this
     disease.
IT
     61825-94-3, Oxaliplatin
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (predictive markers for colorectal cancer)
RN
     61825-94-3 CAPLUS
CN
     Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'][ethanedioato
     (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)
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RE.CNT 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2003 ACS

AN 2002:944194 CAPLUS

DN 138:21423

TI Apoptosis as an predictive marker for response to neoadjuvant radiochemotherapy in patients with rectal cancer

AU Roedel, F.; Roedel, C.; Sauer, R.

CS Department of Radiooncology, University of Erlangen, Erlangen, Germany

Progress in Radio-Oncology VII, Proceedings of the International Meeting on Progress in Radio-Oncology, 7th, Salzburg, Austria, May 15-19, 2002 (2002), 517-523. Editor(s): Kogelnik, H. D.; Lukas, P.; Sedlmayer, F. Publisher: Monduzzi Editore, Bologna, Italy. CODEN: 69DIQO; ISBN: 88-323-2515-2

DT Conference

LA English

AB A preoperative radiochemotherapy (RCT) can markedly improve surgery in locally advanced (T4) rectal cancer. However, tumor response varies considerably even among tumors treated according to the same protocol. On pretreatment biopsies from 44 patients treated uniformly according to a prospective neoadjuvant RCT-protocol the apoptotic index (AI), Ki-67, p53, and bcl-2 were evaluated by immunohistochem. and correlated to histopathol. treatment response and relapse-free survival. Tumors with complete or good response to RCT showed significantly higher pretreatment levels of apoptosis (mean AI: 2.06%) than tumors with moderate, minimal or no regression (AI: 1.44%, p=0.003). The AI was significantly related to Ki-67 (p=0.05), but not to the p53 and bcl-2 status. Tumor regression and AI best predicted relapse-free survival after combined modality treatment and curative surgery.

IT **61825-94-3**, Oxaliplatin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(apoptosis as predictive marker for response to radiochemotherapy in patients with rectal cancer)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2003 ACS

AN 2002:12731 CAPLUS

DN 136:226439

TI Xeroderma pigmentosum group D gene polymorphism predicts clinical outcome to platinum-based chemotherapy in patients with advanced colorectal cancer

AU Park, David J.; Stoehlmacher, Jan; Zhang, Wu; Tsao-Wei, Denice D.; Groshen, Susan; Lenz, Heinz-Josef

CS Department of Medicine, Los Angeles County/University of Southern California Medical Center, Los Angeles, CA, 90033, USA

SO Cancer Research (2001), 61(24), 8654-8658 CODEN: CNREA8; ISSN: 0008-5472

PB American Association for Cancer Research

DT Journal

LA English

AΒ The Xeroderma pigmentosum group D (XPD) protein is an essential participant in nucleotide excision repair and basal transcription. is evidence that three common polymorphisms of the XPD gene (C156A, Asp312Asn, and Lys751Gln) may be assocd. with differential DNA repair activity. Because increased DNA repair plays an important role in chemoresistance to platinum-based compds., we assessed the aforementioned polymorphisms in 73 patients with metastatic colorectal cancer and detd. their outcome to 5-fluorouracil/oxaliplatin. Among those tested for the Lys751Gln polymorphism, 24% (5 of 21) patients with the Lys/Lys genotype responded, vs. 10% (4 of 39) and 10% (1 of 10) of those with the Lys/Gln and Gln/Gln genotypes (P = 0.015). The median survival for those with the Lys/Lys genotype was 17.4 (95% CI 7.9, 26.5) vs. 12.8 (95% CI 8.5, 25.9) and 3.3 (95% CI 1.4, 6.5) months for patients with the Lys/Gln and Gln/Gln resp. (P = 0.002). The polymorphisms CI56A and Asp312Asn of the XPD gene were not assocd. with response to 5-fluorouracil/oxaliplatin nor with survival. However, a linkage was obsd. between the Lys751 allele and the CI56 allele (P = 0.028), and between the Lys751Lys genotype and the Asp312Asp genotype (P < 0.001). We conclude that XPD Lys751Gln polymorphism may be an important marker in the prediction of clin. outcome to platinum-based chemotherapy.

IT **61825-94-3**, Oxaliplatin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(xeroderma pigmentosum group D gene polymorphism predicts clin. outcome to platinum-based chemotherapy in patients with advanced colorectal cancer)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2003 ACS

AN 2001:755008 CAPLUS

DN 136:95689

TI Thymidylate synthase as a molecular target for drug discovery using the National Cancer Institute's Anticancer Drug Screen

AU Parr, Allyson L.; Myers, Timothy G.; Holbeck, Susan L.; Loh, Yenlin J.; Allegra, Carmen J.

CS Medicine Branch, Developmental Therapeutics Program, National Cancer Institute, National Institutes of Health, Bethesda, MD, 20889, USA

SO Anti-Cancer Drugs (2001), 12(7), 569-574 CODEN: ANTDEV; ISSN: 0959-4973

PB Lippincott Williams & Wilkins

DT Journal

LA English

AB Thymidylate synthase (TS) is a crit. cellular target for cancer chemotherapeutics, particularly the fluoropyrimidine and antifolate classes of antineoplastic agents. One of the primary mechanisms of clin. insensitivity to these agents is through the overexpression of the target enzyme, TS. Thus, there is a need for the development of agents which selectively target TS-overexpressing malignant cells. To this end, we conducted a search for agents which potentially selectively target TS-overexpressing cells using two sep. algorithms for identifying such compds. in the NCI Drug Repository by comparing cytotoxicity profiles of 30 000 compds. with the TS expression levels measured by Western blot anal. in 53 cell lines. Using the traditional COMPARE anal. we were unable to identify compds. which maintain a selective ability to kill high TS-expressing cells in a subsequent four cell line validation assay. A new algorithm, termed COMPARE Effect Clusters anal., enabled the identification of a particular drug cluster which contained compds. that maintained a selective ability to kill TS-overexpressing cell lines in the validation assay. While the identified compds. were selectively cytotoxic to TS-overexpressing cells, we found that they were not specifically targeting TS as a mechanism of action. Apparently, the overexpression of TS was providing a marker for sensitivity. This identified class of compds. which appears to be selectively cytotoxic against cells which overexpress TS may be useful for the development of therapeutics for those whose cancers overexpress TS de novo.

IT 61848-70-2, NSC 255917

RL: PAC (Pharmacological activity); BIOL (Biological study) (thymidylate synthase as a mol. target for drug discovery using the National Cancer Institute's Anticancer Drug Screen)

RN 61848-70-2 CAPLUS

CN

Platinum, dichloro[rel-(1R,2S)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (SP-4-3)- (9CI) (CA INDEX NAME)

# RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2003 ACS

AN 2001:341701 CAPLUS

DN 135:220843

TI Irinotecan (Campto R): efficacy as third/forth line therapy in advanced pancreatic cancer

AU Klapdor, R.; Fenner, C.

CS Internal Medicine, Jerusalem Krankenhaus and Center for Clinical and Experimental Tumormarker Diagnosis and Therapy GmbH, Hamburg, 20357, Germany

SO Anticancer Research (2000), 20(6D), 5209-5212 CODEN: ANTRD4; ISSN: 0250-7005

PB International Institute of Anticancer Research

DT Journal

LA English

Following the concept that the actual survival of pancreatic cancer AB patients can only be significantly improved by sequential poly-chemotherapy (EOSPC) in order to add one or two further progression free-survival times (PFST), in addn. to the potential antitumoral effects of a first- or second-line therapy we studied the therapeutic efficacy of a third- or fourth-line chemotherapy with irinotecan alone, or in combination with oxaliplatin and high dose 5-FU/FA resp., in a pilot study in 17 patients. Follow-up was performed on the basis of clin. investigations, imaging methods and the course of tumor markers, mainly CT and CA 19-9. The overall response rate in these cases of third/fourthline therapies was 1PR, 4 MR, 6 SD in the imaging methods compared to 5 PR, 2 MR and 5 SD on the basis of the tumor marker courses in the serum. The median PFST amounted to 4 mo. Side effects could be seen as reported in the literature. Only in 1 patient did treatment have to be stopped due to irinotecan-induced gastrointestinal symptoms. Our data might suggest that combinations are more effective than irinotecan alone. However, further studies have to demonstrate whether irinotecan alone or in combination with e.g. oxaliplatin and 5-FU/FA will be more effective. The results suggested that irinotecan alone or in combination might also be used as third- and fourth-line therapeutical trials in exocrine pancreatic cancer in order to improve the survival time of these patients based on efficacy orientated sequential poly-chemotherapy (EOSPC).

IT **61825-94-3**, Oxaliplatin

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(irinotecan (Campto R) therapeutic efficacy as third/forth line therapy in combination with oxaliplatin and 5-fluorouracil in advanced pancreatic cancer in humans)

RN 61825-94-3 CAPLUS

Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'][ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2003 ACS

AN 2001:341700 CAPLUS

DN 135:220842

TI Improvement of survival by efficacy orientated sequential poly-chemotherapy of exocrine pancreatic cancer

AU Klapdor, R.; Muller, Chr.; Seutter, R.; Bahlo, M.; Peters, W.; Fenner, C.

CS Internal Medicine, Institute of Radiology, Jerusalem Krankenhaus, Hamburg, D-20095, Germany

SO Anticancer Research (2000), 20(6D), 5201-5207 CODEN: ANTRD4; ISSN: 0250-7005

PB International Institute of Anticancer Research

DT Journal

LA English

AΒ Results of palliative chemotherapy in 104 patients suffering from exocrine pancreatic carcinomas are presented. First-line therapy included intraarterial approaches with gemcitabine + mitomycin-C and i.v. systemic treatments with gemcitabine, gemcitabine + mitomycin-C and oxaliplatin, resp. In addn., it was the aim to improve survival by adding second- and third-line chemotherapies, mainly including high dose 5-FU/FA and irinotecan resp. alone or in combinations. Follow-up included clin. investigations, imaging methods and detn. of tumor markers. Evaluation of efficacy followed the WHO guidelines. The results indicated the intraarterial locoregional treatment of exocrine pancreatic cancer with a combination of mitomycin-C + gemcitabine as a highly effective treatment modality with PR + CR of 40% measured by imaging methods and 81% analyzed by tumor marker detns. The survival analyses suggested relevant prolongation of survival in relation to the no. of effective secondand/or third-line therapies (0/1 / >1) with median survival - based on the imaging data - of 7, 11 and 20 mo for Mo tumors and 3,8 and 14 mo for tumor diseases with liver metastases at time of admission, resp. Relevant preconditions for second- and/or third-line therapies of pancreatic carcinomas are given by more or less effective first-line treatment modalities of this cancer disease on the one hand and by the actual diagnostic aids allowing the beginning of first-line therapy as well as the detection of recurrence early enough to try a second- or third-line therapy before clin./ethical aspects prevent further antitumoral treatment trials in the individual patient.

IT **61825-94-3**, Oxaliplatin

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(poly-chemotherapy in treatment of exocrine pancreatic cancer in humans)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2003 ACS

AN 2001:341687 CAPLUS

DN 135:220840

TI Hepatic arterial infusion with oxaliplatin, folinic acid, and 5-fluorouracil in patients with hepatic metastases from colorectal cancer: role of carcino-embryonic antigen in assessment of response

AU Kern, Wolfgang; Beckert, Bettina; Lang, Nicola; Waggershauser, Tobias; Braess, Jan; Schalhorn, Andreas; Hiddemann, Wolfgang

CS University Hospital Grosshadern, Department of Medicine III, Ludwig-Maximilians-University, Munchen, 81366, Germany

SO Anticancer Research (2000), 20(6D), 4973-4975 CODEN: ANTRD4; ISSN: 0250-7005

PB International Institute of Anticancer Research

DT Journal

LA English

AΒ Background: Therapy for patients with hepatic metastases from colorectal cancer (CRC) remains controversial and may be improved by regional oxaliplatin which proved to be effective when administered systemically to patients with advanced CRC. Methods: During the current study, which aims to det. the max. tolerated dose, the dose-limiting toxicity, and the pharmacokinetics of oxaliplatin applied as hepatic intra-arterial infusion combined with folinic acid and 5-fluorouracil in patients with hepatic metastases from CRC, serial levels of carcino-embryonic antigen were detd. and their relationship to response to therapy was assessed. Results: Toxicity mainly consisted of nausea, pain, mucositis, sensorial neuropathy, diarrhea, and thrombocytopenia. The results of tumor marker analyses suggest that progressive disease may be detected early by increasing CEA levels and responsive disease may be characterized by low or decreasing values. Conclusions: Further analyses are warranted to det. the role of CEA in the assessment of response as compared to imaging techniques.

IT **61825-94-3**, Oxaliplatin

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(hepatic arterial infusion with oxaliplatin, folinic acid, and 5-fluorouracil in patients with hepatic metastases from colorectal cancer)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2003 ACS

AN 2000:162755 CAPLUS

DN 133:53284

TI Characterization of an ovarian carcinoma cell line resistant to cisplatin and flavopiridol

AU Bible, Keith C.; Boerner, Scott A.; Kirkland, Kathryn; Anderl, Kari L.; Bartelt, Duane, Jr.; Svingen, Phyllis A.; Kottke, Timothy J.; Lee, Yean K.; Eckdahl, Steven; Stalboerger, Paul G.; Jenkins, Robert B.; Kaufmann, Scott H.

CS Divisions of Medical Oncology, Mayo Medical School, Rochester, MN, 55905,

SO Clinical Cancer Research (2000), 6(2), 661-670 CODEN: CCREF4; ISSN: 1078-0432

PB American Association for Cancer Research

DT Journal

LA English
AB Flavoni

Flavopiridol, the first inhibitor of cyclin-dependent kinases to enter clin. trials, has shown promising antineoplastic activity and is currently undergoing Phase II testing. Little is known about mechanisms of resistance to this agent. In the present study, we have characterized an ovarian carcinoma cell line [OV202 high passage (hp)] that spontaneously developed drug resistance upon prolonged passage in tissue culture. Std. cytogenetic anal. and spectral karyotyping revealed that OV202 hp and the parental low passage line OV202 shared several marker chromosomes, confirming the relatedness of these cell lines. Immunoblotting demonstrated that OV202 and OV202 hp contained similar levels of a variety of polypeptides involved in cell cycle regulation, including cyclin-dependent kinases 2 and 4; cyclins A, D1, and E; and proliferating cell nuclear antigen. Despite these similarities, OV202 hp was resistant to flavopiridol and cisplatin, with increases of 5- and 3-fold, resp., in the mean drug concns. required to inhibit colony formation by 90%. In contrast, OV202 hp and OV202 displayed indistinguishable sensitivities to oxaliplatin, paclitaxel, topotecan, 1,3-bis(2-chloroethyl)-1-nitrosourea, etoposide, doxorubicin, vincristine, and 5-fluorouracil, suggesting that the spontaneously acquired resistance was not attributable to altered P-glycoprotein levels or a general failure to engage the cell death machinery. After incubation with cisplatin, whole cell platinum and platinum-DNA adducts measured using mass spectrometry were lower in OV202 hp cells than OV202 cells. Similarly, after flavopiridol exposure, whole cell flavopiridol concns. measured by a newly developed high performance liq. chromatog. assay were lower in OV202 hp cells. These data are consistent with the hypothesis that acquisition of spontaneous resistance to flavopiridol and cisplatin in OV202 hp cells is due, at least in part, to reduced accumulation of the resp. drugs. These observations not only provide the first characterization of a flavopiridol-resistant cell line but also raise the possibility that alterations in drug accumulation might be important in detg. sensitivity

to this agent.

IT **61825-94-3**, Oxaliplatin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(ovarian carcinoma cell line resistant to cisplatin and flavopiridol)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2003 ACS

AN 1999:759928 CAPLUS

DN 132:201

TI Antitumoral activity of oxaliplatin/cisplatin-based combination therapy in cisplatin-refractory germ cell cancer patients

AU Soulie, P.; Garrino, C.; Bensmaine, M. A.; Bekradda, M.; Brain, E.; Di Palma, M.; Goupil, A.; Misset, J. L.; Cvitkovic, E.

CS Hopital Paul Brousse, FSMSIT, Villejuif, F-94800, Fr.

SO Journal of Cancer Research and Clinical Oncology (1999), 125(12), 707-711 CODEN: JCROD7; ISSN: 0171-5216

PB Springer-Verlag

DT Journal

LA English

Only 20-30% of patient with advanced germ cell tumors, relapsing after std. 1st-line therapy, are curable with current 2nd-line cisplatin-based regimens. New salvage combinations incorporating new active agents are needed. The authors report the toxicity/tolerance of a new salvage regimen based on the oxaliplatin (Eloxatin)/cisplatin combination, evaluated in patients with recurrent, mostly cisplatin-refractory germ cell tumors. 13 Patients were enrolled in this study. All except 1 had received cisplatin-based chemotherapy. 8 Had progressive disease as the best response on their last platinum-based chemotherapy, and 3 had potentially sensitive tumors. The median interval since the last platinum-based chemotherapy was 6 mo (range: 1-36 mo). 1 Untreated patient with poor prognosis was also enrolled. 12 Patients had pathol. markers [median .alpha.-fetoprotein 14 800 ng/mL (58-106), median human chorionic gonadotropin .beta. subunit 7000 IU/mL (37-723 700)]. Patients received either oxaliplatin (130 mg/m2) and cisplatin (100 mg/m2) every 3-4 wk (Bi regimen, 4 patients), or the same regimen combined with 1 to 4 of the following cytotoxic agents: ifosfamide, epirubicin, vinorelbine, methotrexate, dactinomycin, etoposide, and bleomycin (BiC regimen, 9 patients). Treatment was individualized according to each individual patient's pretreatment and clin. characteristics. 7 Objective responses were obtained (overall response rate=54%), all with the BiC regimens (2 complete and 5 partial responses). 2 Patients with recurrent disease achieved a long-term complete response lasting over 5 yr. 4 Partial responders were seen in the 8 cisplatin-refractory tumors, lasting 4-8 mo. IT

RΝ

All objective responses had a corroborating major decrease in tumor marker blood levels (median decrease: 99.7%). The median survival for the whole group was 8 mo. The commonest severe toxicity was hematol. (grade 4 neutropenia in 78% and thrombopenia in 74% of the BiC cycles). The combined salvage regimen induced antitumoral activity in recurrent, cisplatin-refractory germ cell tumors. Oxaliplatin merits further evaluation as a component of combination therapy for this disease. 61825-94-3, Oxaliplatin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oxaliplatin/cisplatin-based combination in germ cell cancer) 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

# RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2003 ACS

AN 1996:209307 CAPLUS

DN 124:306691

TI In vivo antitumor activity of cis-bis-neodecanoato-trans-R,R-1,2-diaminocyclohexane platinum(II) formulated in long-circulating liposomes
AU Mori, Atsuhide; Wu, Su-Ping; Han, Insook; Khokhar, Abdul R.; Perez-Soler,

Roman; Huang, Leaf

CS School Medicine, University Pittsburgh, Pittsburgh, PA, 15261, USA

SO Cancer Chemotherapy and Pharmacology (1996), 37(5), 435-44 CODEN: CCPHDZ; ISSN: 0344-5704

PB Springer

DT Journal

LA English

A lipophilic cisplatin deriv., cis-bisneodecanoato-trans-R,R-1,2-diaminocyclohexane platinum(II) (NDDP), was formulated in liposomes AB composed of phosphatidylcholine (PC) and cholesterol (Chol) addnl. contg. monosialoganglioside (GM1) or polyethyleneglycol conjugated to phosphatidylethanolamine (PGE-PE). These NDDP-contg. long-circulating liposomes were examd. for in vivo antitumor activity using the mouse RIF-1 solid tumor as a target residing outside the reticuloendothelial system (RES). Biodistribution studies, using C3H/HeJ mice and 111In-labeled DTPA-SA as a lipid marker, showed that the activity of GM1 and PEG-PE in prolonging the circulation times of liposomes was preserved in the presence of 3.0 mol% of NDDP in the liposome membranes. The high levels of liposomes remaining in the blood for PC/Chol/GM1 and PC/Chol/PEG3000-PE liposomes were assocd. with high levels of platinum in the blood as detd. by at. absorption spectrophotometry. These NDDP-contg. long-circulating liposomes showed approx. a three-fold increase in tumor accumulation as compared to the conventional PC/Chol liposomes. In vitro cytotoxicity studies using RIF-1 tumor cells showed that the presence of

PEG-PE, but not GM1, significantly enhanced the cytotoxicity of liposomal NDDP. RIF-1 tumor-bearing C3H/HeJ mice were treated twice with 25 mg/kg NDDP in various liposomal formulations on days 12 and 16 after tumor cell inoculation. A significant redn. in the tumor growth rate was obsd. when NDDP was formulated in PC/Chol/PEG3000-PE liposomes which support both efficient tumor accumulation and enhanced cytotoxicity of liposomal NDDP. On the other hand, NDDP formulated in PC/Chol/GM1 liposomes, which display only a high tumor accumulation, had no effect on the tumor growth rate. Furthermore, NDDP formulated in dimyristoylphosphatidylglycerol (DMPG)-contg. liposomes, exhibiting in vitro cytotoxicity comparable to NDDP formulated in PC/Chol/PEG3000-PE liposomes, but showing poor tumor accumulation, was also not effective. These results indicate a potential effectiveness of NDDP formulated in PEG-PE-contg. liposomes for therapy of tumors in non-RES organs.

IT 130197-73-8

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(tumor accumulation and cytotoxicity of neodecanoato-diaminocyclohexane platinum(II) in liposomes contg. polyethyleneglycol-phosphatidylethanolamine)

RN 130197-73-8 CAPLUS

Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']bis(2,2-dimethyloctanoato-.kappa.O)-, (SP-4-2)- (9CI) (CA INDEX NAME)

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L2
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L3
            10 S L3 AND MARKER
L4
L5
             0 S L4 AND NUCLEIC ACID
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       3655138 ACID
       100018 NUCLEIC ACID
                (NUCLEIC (W) ACID)
           20 L3 AND NUCLEIC ACID
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            1 L6 AND LABEL
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L7
    ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
AN
     2002:695720 CAPLUS
DN
     137:211908
TI
    Platinum compounds for nucleic acid labeling
IN
    Braman, Jeffrey Carl; Huang, Haoqiang
PΑ
     Stratagene, USA
     PCT Int. Appl., 88 pp.
SO
     CODEN: PIXXD2
DT
    Patent
LA
    English
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    PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
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PΙ
    WO 2002069898 A2 20020912
                                          WO 2002-US6410 20020301
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            PT, SE, TR
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    US 2002165369
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                                          US 2002-86515
                                                           20020301
PRAI US 2001-272921P
                      P
                           20010302
    MARPAT 137:211908
AB
    The invention relates to novel platinum-based compds. for labeling
    biomols. Platinum based labeling compds. according to the invention
     irreversibly attach to a target biomol. via coordination of a platinum
     (II) metal center with N or S atoms on the target biomol. The invention
    relates to the novel compds. themselves, methods of making the
    platinum-based labeling compds., probes labeled with such compds., methods
    of making such labeled probes, and kits comprising the novel
    platinum-based labeling compds. and/or probes labeled with them. The
     invention also relates to methods of using probes labeled with
    platinum-based labeling compds. of the invention, particularly array and
    microarray hybridization methods. Thus, platinum (Cy3-cyclohexanediamine)
    dinitrate was synthesized and shown to label a synthetic
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73-residue oligonucleotide with 90-95% yield by reaction at 80.degree. for

30 min using a two-fold excess of platinum labeling compd.

NAME)

Me<sub>2</sub>N

-0<sub>2</sub>C

NMe<sub>2</sub>

RN 455922-68-6 CAPLUS
CN Platinum, [rel-9-[5-[[[6-[[(1R,2R)-2-(amino-.kappa.N)cyclohexyl]amino-.kappa.N]-6-oxohexyl]amino]carbonyl]-2-carboxyphenyl]-3,6-bis(dimethylamino)xanthyliumato]bis(nitrato-.kappa.O)-, (SP-4-3)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O_2N-O^- & H_2 \\ O_2N-O^- & Pt \\ & HN \\ & HN$$

RN 455922-69-7 CAPLUS
CN Platinate(1-), [2-[5-[1-[6-[[6-[[2-(amino-.kappa.N)cyclohexyl]amino-.kappa.N]hexyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-3H-indoliumato(2-)]bis(nitrato-.kappa.O)-, hydrogen, (SP-4-3)- (9CI) (CAINDEX NAME)

● H+

IT 60732-70-9P 455921-39-8P 455922-67-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(platinum compds. for nucleic acid labeling)

RN 60732-70-9 CAPLUS

CN Platinum, (trans-1,2-cyclohexanediamine-.kappa.N,.kappa.N')bis(nitrato-.kappa.O)-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN 455921-39-8 CAPLUS

CN Platinum, [9-[4(or 5)-[[[3-[[2-(amino-.kappa.N)cyclohexyl]amino-.kappa.N]propyl]amino]carbonyl]-2-carboxyphenyl]-3,6-bis(dimethylamino)xanthyliumato]dichloro- (9CI) (CA INDEX NAME)

RN 455922-67-5 CAPLUS

CN Platinum, [rel-9-[5-[[[6-[[(1R,2R)-2-(amino-.kappa.N)cyclohexyl]amino-.kappa.N]-6-oxohexyl]amino]carbonyl]-2-carboxyphenyl]-3,6-bis(dimethylamino)xanthyliumato]dichloro-, (SP-4-3)- (9CI) (CA INDEX NAME)

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=> d his
       (FILE 'HOME' ENTERED AT 14:59:06 ON 16 JUN 2003)
      FILE 'REGISTRY' ENTERED AT 14:59:16 ON 16 JUN 2003
                     STRUCTURE UPLOADED
L1
L2
              4017 S L1 FULL
      FILE 'CAPLUS' ENTERED AT 15:00:05 ON 16 JUN 2003
              1799 S L2
L3
                 10 S L3 AND MARKER
L4
                  0 S L4 AND NUCLEIC ACID
L5
                 20 S L3 AND NUCLEIC ACID
L6
                  1 S L6 AND LABEL
L7
=> s 16 and label?
          386606 LABEL?
                 1 L6 AND LABEL?
L8
=> s 16 and reporter?
            33440 REPORTER?
                 1 L6 AND REPORTER?
L9
=> s 19 not 18
L10
                 1 L9 NOT L8
=> d l10 bib abs hitstr
      ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
      2001:508052 CAPLUS
ΑN
DN
      135:87149
TI
      High-throughput quantification of cellular injury using reporter
      gene under the control of the GADD153 promoter and the screening
      DNA-damaging cytotoxins
      Howell, Stephen B.; Lin, Xinjian; Gately, Dennis P.
TN
PA
SO
      U.S. Pat. Appl. Publ., 18 pp.
      CODEN: USXXCO
      Patent
DT
LΑ
      English
FAN.CNT 1
                                                        APPLICATION NO. DATE
      PATENT NO.
                             KIND DATE
                            ----
                                     -----
                                                         ______
                                                         US 2000-479529 20000107
                                     20010712
ΡI
      US 2001007768
                              A1
      US 6344324
                              B2
                                     20020205
                                                                                20010104
      WO 2001051607
                              A1
                                     20010719
                                                        WO 2001-US293
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                     20000107
PRAI US 2000-479529
                            Α
       The present invention features a novel cellular injury reporter
       system in which a chimeric gene contg. the GADD153 promoter linked to the
       coding region of an enhanced green fluorescent protein (EGFP) gene was
       stably integrated into the genome of carcinoma cells. Activation of the
       GADD153 promoter was quantified using flow cytometric measurement of EGFP
```

CN

expression following drug exposure. This reporter system is suitable for high throughput in vitro and in vivo screening for agents capable of producing cytotoxicity via a wide variety of different mechanisms, and can be utilized to investigate the relative potency of structurally related DNA adducts.

**61825-94-3**, Oxaliplatin **62816-98-2**, Tetraplatin IT

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anal. of cytotoxic effects of; high-throughput quantification of cellular injury using reporter gene under control of GADD153 promoter and screening DNA-damaging cytotoxins)

RN

61825-94-3 CAPLUS
Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN62816-98-2 CAPLUS

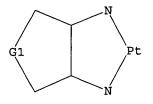
Platinum, tetrachloro[rel-(1R,2R)-1,2-cyclohexanediamine-CN .kappa.N,.kappa.N']-, (OC-6-22)- (9CI) (CA INDEX NAME)

Uploading 10086515.str

L11 STRUCTURE UPLOADED

=> d l11 L11 HAS NO ANSWERS

L11 STR



G1 C, O, S

Structure attributes must be viewed using STN Express query preparation.

=> s l11 full

FULL SEARCH INITIATED 15:18:30 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 9227 TO ITERATE

100.0% PROCESSED 9227 ITERATIONS 97 ANSWERS

SEARCH TIME: 00.00.03

L12 97 SEA SSS FUL L11

=> file caplus

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SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
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SINCE FILE TOTAL

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FILE COVERS 1907 - 16 Jun 2003 VOL 138 ISS 25 FILE LAST UPDATED: 15 Jun 2003 (20030615/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s 112
L13
            38 L12
=> s l13 and marker?
        148910 MARKER?
             0 L13 AND MARKER?
L14
=> s 113 and lqabel?
             0 LQABEL?
             0 L13 AND LOABEL?
L15
=> s 113 and label
         50966 LABEL
             0 L13 AND LABEL
L16
=> s 113 and label?
        386606 LABEL?
L17
             0 L13 AND LABEL?
=> s l17 and reporter?
         33440 REPORTER?
L18
             0 L17 AND REPORTER?
=> s 113 and reporter?
         33440 REPORTER?
             0 L13 AND REPORTER?
L19
=> s 113 and nucleic acid
        142357 NUCLEIC
       3655138 ACID
        100018 NUCLEIC ACID
                 (NUCLEIC (W) ACID)
L20
             0 L13 AND NUCLEIC ACID
=> d l13 bib abs hitstr 1-38
L13
     ANSWER 1 OF 38 CAPLUS COPYRIGHT 2003 ACS
AN
     2000:836230 CAPLUS
DN
     134:125167
ΤI
     Effect of Ring Size on Coordination Properties of trans-1,2-
     Cycloalkanediamine Ligands: Synthesis of Dinuclear Platinum(II) Complexes
     as Potential DNA Cross-Linkers
     Ongeri, Sandrine; Aitken, David J.; Husson, Henri-Philippe; Kozelka, Jiri;
ΑU
     Viossat, Bernard
     Laboratoire de Chimie Therapeutique, Universite Rene Descartes (Paris V),
CS
     Paris, 75270, Fr.
     Inorganic Chemistry (2000), 39(26), 6131-6133
so
     CODEN: INOCAJ; ISSN: 0020-1669
PΒ
     American Chemical Society
DT
     Journal
     English
LA
os
     CASREACT 134:125167
AR
     Trans-,2-cyclopropanediamine (L) and trans-1,2-cyclobutanediamine (L1)
     reacted with K[PtCl3(DMSO)] to give trans-[{PtCl2(DMSO)}2(.mu.-L)] and
     trans-[{PtCl2(DMSO)}2(.mu.-L1)], resp. However, trans-1,2-
     cyclohexanediamine (L2) and 1,2-cyclopentanediamine (L3) yielded mixed
     complex salts [PtClL2(DMSO)][PtCl3(DMSO)] (I) and
     [PtClL3(DMSO)][PtCl3(DMSO)], resp. The crystal structure of I was detd.:
     monoclinic, space group P21/n, Z = 4, R = 0.0382.
IT
     321134-72-9P 321134-73-0P
```

```
ANSWER 2 OF 38 CAPLUS COPYRIGHT 2003 ACS
L13
AN
     2000:759674 CAPLUS
DN
     134:36336
     Cis-3,4-diaminocyclopentanol complexes of platinum(II)
TI
ΑU
     Wang, Zheng; Guan, Yousheng; Fanwick, Phillip E.; Stowell, Joseph G.;
     Bergstrom, Donald E.; Green, Mark A.
     Department of Medicinal Chemistry and Molecular Pharmacology, Purdue
CS
     University, West Lafayette, IN, 47907-1333, USA
     Inorganica Chimica Acta (2000), 307(1-2), 57-62
SO
     CODEN: ICHAA3; ISSN: 0020-1693
PB
     Elsevier Science S.A.
DT
     Journal
LA
     English
     CASREACT 134:36336
os
AΒ
     Pt(II) complexes were prepd. using cis-1,2-diaminocyclopentane and
     cis-3,4-diaminocyclopentanols, specifically, cis-[PtCl2(cis-1,2-
     diaminocyclopentane)] (I), cis-[PtCl2(cis,syn-3,4-diaminocyclopentanol)]
     (II), cis-[PtCl2(cis,anti-3,4-diaminocyclopentanol)] (III), and
     bis(cis,anti-3,4-diaminocyclopentanol)platinum(II) tetrachloroplatinate
     (IV). The complexes were synthesized from K2PtCl4 and the corresponding
     cis-diamines. Crystal structures of the Pt(II) complexes were detd. by
     x-ray single crystal diffraction. Parameters are as follows: space group
     P21/n, a 7.8133(4), b 13.5959(7), c 9.8561(7) .ANG., .beta.
     113.201(4).degree., V = 962.33(19) .ANG.3, Z = 4 for I; space group P21/n,
     a 6.6076(2), b 11.3481(4), c 11.9739(4) .ANG., .beta. 98.364(2).degree., Z
     = 4 for II; space group P21/c, a 12.7358(2), b 20.8072(5), c 12.1253(3)
     .ANG., .beta. 112.6139(13).degree., Z = 12 for III; space group P21/c, a
     10.0248(3), b 8.9029(5), c 11.1253(6) .ANG., .beta. 109.174(3).degree., Z
     = 12 for IV. The coordination spheres about the Pt atoms are slightly
     distorted square planar geometries owing to the presence of the
     geometrically strained five-membered PtN2C2 ring.
     83059-01-2P 310872-03-8P 310872-07-2P
IT
     311806-76-5P
     RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
        (prepn. and crystal structure of)
RN
     83059-01-2 CAPLUS
CN
     Platinum, dichloro[rel-(1R,2S)-1,2-cyclopentanediamine-.kappa.N,.kappa.N']-
```

, (SP-4-3) - (9CI) (CA INDEX NAME)

RN 310872-03-8 CAPLUS
CN Platinum, dichloro[rel-(3R,4S)-3,4-di(amino-.kappa.N)cyclopentanol]-,
(SP-4-3)- (9CI) (CA INDEX NAME)

HO
$$\begin{array}{c|c}
H_2 & C1 \\
N & \\
Pt & \\
NH_2
\end{array}$$

RN 310872-07-2 CAPLUS

$$\begin{array}{c|c} & H_2 & \text{-Cl} & \text{O} \\ & \text{N} & \text{/} & \text{||} \\ & 2 + \text{Pt} & \text{S-Me} \\ & \text{|} & \text{|} \\ & & \text{NH}_2 & \text{Me} \end{array}$$

CM 2

CRN 31203-96-0 CMF C2 H6 Cl3 O Pt S CCI CCS

$$\begin{array}{c|c} & H_2 & C1 & O \\ N & / & || & \\ 2 + Pt & S - Me \\ & & | & | \\ & N_{H_2} & Me \end{array}$$

C1 -

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

CN Platinum(2+), bis[(1.alpha.,3.beta.,4.beta.)-3,4-di(amino.kappa.N)cyclopentanol]-, (SP-4-2)-, (SP-4-1)-tetrachloroplatinate(2-)
(1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 310872-06-1 CMF C10 H24 N4 O2 Pt CCI CCS

HO 
$$H_2$$
  $H_2$   $H_2$ 

CM 2

CRN 13965-91-8 CMF Cl4 Pt CCI CCS

RN 311806-76-5 CAPLUS

CN Platinum, dichloro[(1.alpha.,3.beta.,4.beta.)-3,4-di(amino-.kappa.N)cyclopentanol]-, (SP-4-3)- (9CI) (CA INDEX NAME)

HO
$$\begin{array}{c|c}
H_2 & C1 \\
N & / 2+ \\
Pt & 2+ \\
NH_2
\end{array}$$

$$\begin{array}{c|c}
NH_2 & C1 \\
NH_2 & C1
\end{array}$$

# RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1998:172031 CAPLUS

DN 128:238477

TI Synthesis, structure and magnetic properties of transition metal complexes of the nitroxide 2',5'-dihydro-4',5',5'-trimethyl-spiro-[4,5-diazafluorene-9,2'-imidazol]-1-oxyl

AU Hintermaier, Frank; Beck, Wolfgang

CS Institut fur Anorganische Chemie der Universitat, Munchen, D-80333, Germany

SO Polyhedron (1998), 17(4), 483-489 CODEN: PLYHDE; ISSN: 0277-5387 PB Elsevier Science Ltd.

DT Journal

LA English

With the radical 2',5'-dihydro-4',5',5'-trimethyl-spiro-[4,5-diazafluorene-9,2'-imidazol]-1-oxyl (L), transition metal complexes were prepd.:

[ML3](SbF6)2.cntdot.4H2O with M2+ = Mn2+ (1), Fe2+ (2), Co2+ (3), Ni2+ (4), Zn2+ (5). Reaction of L with Cu2+ in methanol yielded different products depending on the counterion. In the presence of weakly coordinating anions the Cu(II) complexes [Cu2L3](SbF6)2.cntdot.H2O (6), [Cu2L3](OTf)2.cntdot.2MeOH (7) and [Cu2L3](Cl04)2 (8) were formed. Stronger coordinating counterions gave the complexes CuL2Cl2.cntdot.H2O (9), CuL2Br2.cntdot.H2O (10) and CuL2(NO3)2 (11). Also the syntheses of [Ag2L3](SbF6)2.cntdot.2H2O (12), Pd(L)Cl2.cntdot.H2O (13), Pt(L)Cl2.cntdot.H2O (14), Ni(L)Cl2 (15a), Ni(L)Cl2.cntdot.4H2O (15b) and [Ru(bipy)2(L)]Cl2.cntdot.4H2O (16) are reported. The magnetic moments of 1-6 and 10 correspond in the range 200-300 K to those expected for noninteracting spins of the metal ion and the radicals. At low temps. spin pairing of metal and radical spins is obsd. for 1-3.

IT 204399-74-6P

RN 204399-74-6 CAPLUS

CN Platinum, dichloro(4',5',5'-trimethylspiro[5H-cyclopenta[2,1-b:3,4-b']dipyridine-5,2'-[2H]imidazol]-1'(5'H)-yloxy-.kappa.N1,.kappa.N9)-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L13
     ANSWER 4 OF 38 CAPLUS COPYRIGHT 2003 ACS
AN
     1997:119101 CAPLUS
DN
     126:126892
ΤI
     Drug mitochondrial-targeting agents
IN
     Steliou, Kosta
PΑ
     Trustees of Boston University, USA
SO
     PCT Int. Appl., 79 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
```

```
APPLICATION NO.
                                                            DATE
                      ----
PΙ
     WO 9639193
                            19961212
                       A2
                                           WO 1996-US10293 19960606
                            19970605
     WO 9639193
                      A3
             AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
             ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,
             LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN
```

US 6316652	B1	20011113	US 1995-468844 199506	506
AU 9663853	A1	19961224	AU 1996-63853 199606	506
EP 831918	A2	19980401	EP 1996-923305 199606	506
R: CH, D	E, FR, GB	, LI, SE		

PRAI US 1995-468844 A 19950606 WO 1996-US10293 W 19960606

OS MARPAT 126:126892

AB The invention relates to novel targeting drug agents that are targeted for entry into the mitochondria. More specifically, the agents are cisplatin derivs. called mitoplatins which are useful as anti-tumor agents.

Mitoplatins are named for their targeting to the mitochondrial DNA via the carnitine-acylcarnitine translocase system. The invention also relates to methods of synthesizing mitoplatins, compns. of matter contg. mitoplatins and methods of using the mitoplatins. Compds. of the invention, in addn. to being useful for the treatment of neoplasms, may also be used to treat arthritic disorders.

IT 186253-71-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug mitochondrial-targeting agents, and prepn. thereof)

RN 186253-71-4 CAPLUS

CN Platinum, [3-carboxy-2-[[5-[3,4-di(amino-.kappa.N)tetrahydro-2-thienyl]-1oxopentyl]oxy]-N,N,N-trimethyl-1-propanaminiumato][1,1cyclobutanedi(carboxylato-.kappa.O)(2-)]-, [SP-4-3-[2S[2.alpha.(S\*),3.alpha.,4.alpha.]]]- (9CI) (CA INDEX NAME)

IT 186253-73-6 186258-37-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(drug mitochondrial-targeting agents, and prepn. thereof)

RN 186253-73-6 CAPLUS

CN Platinum, [3-carboxy-2-[[5-[3,4-di(amino-.kappa.N)tetrahydro-2-thienyl]-1-oxopentyl]oxy]-N,N,N-trimethyl-1-propanaminiumato]dichloro-, [SP-4-3-[2S-[2.alpha.(S\*),3.alpha.,4.alpha.]]]- (9CI) (CA INDEX NAME)

RN 186258-37-7 CAPLUS

CN Platinate(1-), dichloro[3,4-di(amino-.kappa.N)tetrahydro-2-thiophenepentanoic acid 1-oxidato]-, sodium, [SP-4-3-[1S-(1.alpha.,2.beta.,3.beta.,4.beta.)]]- (9CI) (CA INDEX NAME)

Na +

IT 186253-69-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction; drug mitochondrial-targeting agents, and prepn. thereof)

RN 186253-69-0 CAPLUS

CN Platinum, [3-carboxy-2-[[5-[3,4-di(amino-.kappa.N)tetrahydro-2-thienyl]-1-oxopentyl]oxy]-N,N,N-trimethyl-1-propanaminiumato]diiodo-, [SP-4-3-[2S-[2.alpha.(S\*),3.alpha.,4.alpha.]]]- (9CI) (CA INDEX NAME)

L13 ANSWER 5 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1996:331009 CAPLUS

DN 125:168281

TI Synthesis and molecular structures of palladium and platinum complexes of PTFA: models of Grignard cross-coupling catalysts

AU Jedlicka, Brigitte; Ruelke, Richard E.; Weissensteiner, Walter; Fernandez-Galan, Rafael; Jalon, Felix A.; Manzano, Blanca R.; Rodriguez-de la Fuente, Jeronimo; Veldman, Nora; Kooijman, Huub; et al.

CS Institut fuer Organische Chemie der Universitaet Wien, Waehringerstrasse 38, Vienna, A-1090, Austria

SO Journal of Organometallic Chemistry (1996), 516(1-2), 97-110 CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier

DT Journal

LA English

OS CASREACT 125:168281

GI

Ι

A no. of Pd(0) and Pd(II) as well as Pt(0) and Pt(II) complexes of AΒ (.eta.5-cyclopentadienyl) - (.eta.5-4-endo-N, N-dimethylamino-3diphenylphosphino-4,5,6,7-tetrahydro-1H-indenyl)iron (I; PTFA), (PTFA)M(0)(alkene) and (PTFA)M(II)(R)X (M = Pd, Pt; alkene = dibenzylideneacetone, maleic anhydride, fumaronitrile and tetracyanoethylene; R = CH3, Ph and PhCH2; X = Cl, Br and I), were synthesized as models of Grignard cross-coupling catalysts. All complexes were prepd. either by proper ligand exchange or via oxidative addn. reactions. A comparison of the x-ray structures of five complexes [(PTFA)Pd(fumaronitrile), 4, (PTFA)PdCl2, 8, (PTFA)Pd(Ph)I, 10, (PTFA) Pt(tetracyanoethylene), 6, and (PTFA) PtMeCl, 13] showed that, in contrast to complexes of 2-(1-N,N-dimethylaminoethyl)-1-diphenylphosphinoferrocene (PPFA), the overall mol. structures of PTFA complexes are comparable; they neither strongly depend on the oxidn. state of the metal nor on the type of addnl. ligands coordinated to the metal. IT 180067-01-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(ligand substitution reaction with (cyclopentadienyl) [amino(diphenylpho sphino]tetrahydroindenyl]iron)

RN 180067-01-0 CAPLUS

CN Platinum, (5H-cyclopenta[2,1-b:3,4-b']dipyridin-5-one-N1,N9)[(1,2-.eta.)-ethenetetracarbonitrile]- (9CI) (CA INDEX NAME)

L13 ANSWER 6 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1992:247969 CAPLUS

DN 116:247969

TI Characterization of acquired resistance to cisdiamminedichloroplatinum(II) in mouse leukemia cell lines

AU Tashiro, Tazuko; Sato, Yuko

CS Cancer Chemotherapy Cent., Jap. Found. Cancer Res., Tokyo, 170, Japan

SO Japanese Journal of Cancer Research (1992), 83(2), 219-25 CODEN: JJCREP; ISSN: 0910-5050

DT Journal

LA English

AB The authors established in vivo cisplatin-resistant mouse leukemia cell lines, L-1210/DDP and P388/DPP, in order to elucidate the mechanism of acquired resistance to cisplatin. Resistance indexes were 22 and 14, resp., when the cells were exposed to cisplatin for 48 h. Uptake of cisplatin by both resistance lines was significantly reduced, compared to values for the resp. parent lines (17% for L-1210/DDP and 27% for P338/DDP, at 100 .mu.M for 1 h). While glutathione contents in the resistant cells were 1.7-1.9 times higher than those in the sensitive ones, their redn. by preincubation with buthionine sulfoximine did not influence the sensitivity of the cells to cisplatin. In addn., the resistant lines did not show lower sensitivity to CdCl2 than the resp. sensitive ones, suggesting that intracellular SH groups might contribute little to the mechanism of cisplatin resistance in these cells. Postincubation with DNA repair inhibitors, caffeine and aphidicolin, did not selectively enhance the sensitivity of the resistant cells to cisplatin. These results suggested that reduced drug uptake would be a primary mechanism of cisplatin resistance in L-1210/DDP and P388/DDP. Cross-resistance patterns to platinum complexes were quite different between L-1210/DDP and P388/DDP. Colon DDP, another cisplatin-resistant mouse tumor showed a different pattern from those obsd. with L-1210/DDP and P388/DDP. In the development of new platinum complexes the authors should use plural resistant lines for examg. cross-resistance patterns to candidate platinum complexes.

IT 141554-56-5

RL: BIOL (Biological study)

(cisplatin resistant tumor cell lines cross-resistance to)

RN 141554-56-5 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, (SP-4-2)- (9CI) (CA INDEX NAME)

L13 ANSWER 7 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1991:669236 CAPLUS

DN 115:269236

TI Novel platinum(II)-diaminobiotin complexes. Their synthesis and characterization

AU Noels, A. F.; Nihant, N.; Hubert, A. J.

CS Inst. Chem., Univ. Liege, Sart Tilman, B-4000, Belg.

SO Bulletin des Societes Chimiques Belges (1991), 100(7), 497-502 CODEN: BSCBAG; ISSN: 0037-9646

DT Journal

LA English

AB The diaminobiotin ligand (HL) (cis-3,4-diamino-2-tetrahydrothiophene valeric acid) was reacted with K2PtCl4 and with ([Pt(H2O)2(NH3)2]2+ to yield new platinum complexes which were coordinated in a bidentate fashion

through the diamine function of the ligand and have [PtN2Cl2] and [PtN4] geometries resp. NMR data are given for HL, PtCl2(HL) and [Pt(NH3)2L](ClO4)3.

IT 137475-24-2P 137475-26-4P

RN 137475-24-2 CAPLUS

CN Platinate(1-), dichloro(3,4-diaminotetrahydro-2-thiophenepentanoato-N,N')-, hydrogen, [SP-4-3-[2S-(2.alpha.,3.alpha.,4.alpha.)]]- (9CI) (CA INDEX NAME)

● H+

RN 137475-26-4 CAPLUS

CN Platinum(3+), diammine(3,4-diaminotetrahydro-2-thiophenepentanoato-N,N')-, [SP-4-3-[2S-(2.alpha.,3.alpha.,4.alpha.)]]-, triperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 137475-25-3 CMF C9 H23 N4 O2 Pt S CCI CCS

CM 2

CRN 14797-73-0 CMF Cl O4

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ΑN
     1991:464745 CAPLUS
DN
     115:64745
ΤI
     Preparation of organoplatinum antileukemia drugs
ΙN
     Talebian, Abdolhossen; Green, Dianna C.; Schein, Philip S.
PA
     Georgetown University, USA
SO
     PCT Int. Appl., 52 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 3
     PATENT NO.
                                           APPLICATION NO. DATE
                      KIND DATE
                     ____
                           -----
                                           -----
                                                            _____
PΙ
     WO 9008157
                            19900726
                                           WO 1990-US171
                                                            19900117
                      A1
         W: AU, CA, HU, JP, NO, SU
         RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE
                                           US 1989-301773
     US 4946954
                            19900807
                                                            19890126
                       Α
     AU 9050394
                                           AU 1990-50394
                       A1
                            19900813
                                                            19900117
     ZA 9000336
                            19901031
                                           ZA 1990-336
                       Α
                                                            19900117
     EP 462980
                                           EP 1990-902930
                       Α1
                            19920102
                                                            19900117
        R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE
                                           JP 1990-503681
     JP 04502767
                       T2
                            19920521
                                                            19900117
     JP 2771326
                       B2
                            19980702
     RU 2074861
                       C1
                                           RU 1990-5001256
                            19970310
                                                            19900117
     NO 9102732
                       Α
                            19910711
                                           NO 1991-2732
                                                            19910711
    NO 180588
                       В
                            19970203
     NO 180588
                       С
                            19970514
PRAI US 1989-297368
                            19890117
     US 1989-301773
                            19890126
     US 1987-74825
                            19870717
     US 1988-143761
                            19880114
     WO 1990-US171
                            19900117
os
    MARPAT 115:64745
GI
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$$\begin{array}{c|c} & & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & &$$

AB Due to the dicarboxylate-imparted mol. structure the chelated platinum (II) complex amine salts I and II are more water-sol., and less damaging to kidney and bone marrow. I and II (n = 0 or 1; when n = 1, R1 = H or C1-4 alkyl, R = alkyl, mono- or disaccharide; when n = 0, R1 = H, C1-4 alkyl, R = H, halo, alkyl, etc.; R2, R3 = H, C1-4 alkyl; R2R3 = fused or bicycle, or alkylene in 4-8 member ring when R .noteq. R1 = H and n = 0; m = 1, 2; R4 = mono- or disaccharide; R5, R6 = H, C1-4 alkyl; CR5R6 = 5- or

6-member ring) are prepd. as antileukemia drugs. Pentaacetylgluconyl chloride was reacted with iminomalonic acid in N,N-diisopropylethylamine/CH3CN to give the iminomalonic acid intermediate, which was treated with Ba(OH)2.8H2O and then added to cis-(R,R)-sulfato(cyclohexane-1,2-diamine-N,N')platinum(II) in an aq. soln. to give the iminomalonic acid-chelated Pt-complex cyclohexanediamine salt. A dosage form suitable for i.v. administration was 130 mg active ingredient/m2 body surface of patient in an isotonic soln. and in vivo tests on mice-carried P388 leukemia cells were conducted.

IT 62863-66-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, as intermediate in prepn. of dicarboxylate platinum complex antileukemia drug)

RN 62863-66-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[sulfato(2-)-O,O']-,
[SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

IT 122681-30-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as antileukemia drug)

RN 122681-30-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [4-[[thioxo[[3,4,6-tri-O-acetyl-2-(acetylamino)-2-deoxy-.alpha.-D-galactopyranosyl]amino]methyl]amino]-1,1-cyclohexanedicarboxylato(2-)]-, (SP-4-2)- (9CI) (CA INDEX NAME)

# \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L13 ANSWER 9 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1991:440792 CAPLUS

DN 115:40792

TI Platinum pharmaceutical agents

IN Talebian, Abdolhossen; Green, Dianna C.; Schein, Philip S.

PA Georgetown University, USA

SO U.S., 16 pp. Cont.-in-part of U.S. Ser. No. 297,368.
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

FAN	I.CNT 3			
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
ΡI	US 4946954	A 19900807	US 1989-301773	19890126
	US 4895936	A 19900123	US 1988-143761	19880114
	CA 2045120	AA 19900718	CA 1990-2045120	19900117
	WO 9008157	A1 19900726	WO 1990-US171	19900117
	W: AU, CA	, HU, JP, NO, SU		
	RW: AT, BE	, CH, DE, DK, ES,	FR, GB, IT, LU, NL, SE	
	AU 9050394	A1 19900813	AU 1990-50394	19900117
	ZA 9000336	A 19901031	ZA 1990-336	19900117
	EP 462980	A1 19920102	EP 1990-902930	19900117
	R: AT. BE	. CH. DE. DK. ES.	FR, GB, IT, LI, LU, NL	, SE

	JР	04502767	T2	19920521	JΡ	1990-503681	19900117
	JP	2771326	B2	19980702			
	HU	59690	A2	19920629	HU	1990-1456	19900117
	$_{ m IL}$	93090	A1	19951031	IL	1990-93090	19900117
	NO	9102732	Α	19910711	NO	1991-2732	19910711
	NO	180588	В	19970203			
	NO	180588	С	19970514			
	AU	9454792	A1	19940331	ΑU	1994-54792	19940131
	AU	674185	B2	19961212			
PRAI	US	1987-74825		19870717			
	US	1988-143761		19880114			
	US	1989-297368		19890117			
	US	1989-301773		19890126			
	WO	1990-US171		19900117			
os	MAI	RPAT 115:40792					
GI							

$$(CH_2)_n - CO_2 NH_2R^2$$
 $O$ 
 $R - C - N - CH - CO_2 NH_2R^3$ 
 $R_1$ 

AB Pt compds. useful in the treatment of cancer are disclosed. Compns. contg. these compds. and methods of using the same are also discussed, with antitumor testing data. Compds. having the formula I, where n is 0 or 1 and when n is 1, R1 is H or C1-4 alkyl, R is nonsubstituted higher alkyl or mono or disaccharide or a deriv. of a mono or disaccharide, when n is 0, R1 is H or C1-alkyl, R is H, halogen, nonsubstituted C1-20 alkyl, aryl, arlalkyloxy, mono or disaccharide, or a deriv. of a mono or disaccharide, and R2 and R3 are selected from H, C1-4 alkyl or R2 and R3 or R2 and R3 together are linked to adjacent C atoms on a 4-, 5-, or 6-membered ring structure, or R2 and R3 together form a fused or bicyclic ring with adjacent C atoms, or R2 and R3 together are a substituted or unsubstituted C1-5 alkylene group; with the proviso that R and R1 cannot both be H when n = 0, or a pharmaceutically acceptable salt thereof, are particularly useful.

IT 122681-30-5P

Ι

RN 122681-30-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [4-[[thioxo[[3,4,6-tri-O-acetyl-2-(acetylamino)-2-deoxy-.alpha.-D-galactopyranosyl]amino]methyl]amino]-1,1-cyclohexanedicarboxylato(2-)]-, (SP-4-2)- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 62863-66-5

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, in platinum complex antitumor agent prepn.)

RN 62863-66-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [sulfato(2-)-O,O']-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

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ANSWER 10 OF 38 CAPLUS COPYRIGHT 2003 ACS
L13
AN
     1991:16606 CAPLUS
     114:16606
DN
     Platinum(II) complexes, their preparation, and use as antitumor agents
ΤI
     Spinelli, Silvano; Pasini, Alessandro; Menta, Ernesto; Zunino, Franco;
IN
     Tognella, Sergio
     Boehringer Biochemia Robin S.p.A., Italy
PA
so
     PCT Int. Appl., 57 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
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                            -----
PΙ
     WO 8909218
                            19891005
                                           WO 1989-EP330
                                                            19890325
                      A1
         W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, RO, SD,
             SU, US
         RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR,
             NL, SE, SN, TD, TG
                                           AU 1989-32927
     AU 8932927
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                            19891016
                                                            19890325
     AU 633817
                       B2
                            19930211
     EP 341409
                       A1
                            19891115
                                           EP 1989-105369
                                                            19890325
     EP 341409
                       В1
                            19931229
        R: ES, GR
     EP 415939
                      A1
                            19910313
                                           EP 1989-903737
                                                            19890325
        R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
     HU 55401
                            19910528
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                     A2
                                                            19890325
     HU 206220
                      В
                            19920928
     JP 03503529
                      T2
                            19910808
                                           JP 1989-503437
                                                            19890325
                                           AT 1989-105369
     AT 99315
                      Ε
                            19940115
                                                            19890325
     ES 2061756
                      Т3
                                           ES 1989-105369
                            19941216
                                                            19890325
                      Α
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                            19891129
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                            19920414
                                           US 1990-585118
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PRAI IT 1988-20074
                            19880401
     EP 1989-105369
                            19890325
     WO 1989-EP330
                            19890325
OS
    MARPAT 114:16606
GI
     For diagram(s), see printed CA Issue.
AB
     Compds. of formula I, (where R1 and R2, that can be the same or different,
     are H, alkyl, aryl, aralkyl groups or, if taken together, cycloalkyl
     groups; A is a C atom, a residue of 2,3-dioxybutandioic-2,4-dioxyphthalic
     acid or disubstituted malonic acid derivs.; n1 and n2 are selected in such
     a manner that the result of their addn. is from 2-40; T1 and T2 that can
    be the same or different, are H, alkyl, benzyl, Ph, acyl, or cycloalkyl,
     or a residue of II-IV and V-VI) are useful as antitumor agents in human
     therapy.
IT
     128137-43-9P
```

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as antitumor agent)

128137-43-9 CAPLUS

RN

CN Platinum, bis(1,2-cyclopentanediamine-N,N')[.mu.-[1,4,7,10,13,16-hexaoxacyclooctadecane-8,9,17,18-tetracarboxylato(4-)-08,09:017,018]]di-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

PAGE 3-A

L13 ANSWER 11 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1990:624191 CAPLUS

DN 113:224191

TI Mechanisms for resistance and cross-resistance patterns of cisplatin-resistant tumor lines

AU Tashiro, Tazuko

CS Cancer Chemother. Cent., Jpn. Found. Cancer Res., Japan

SO Gan to Kagaku Ryoho (1990), 17(3, Pt. 2), 509-14 CODEN: GTKRDX; ISSN: 0385-0684

DT Journal

LA Japanese

AB Mechanism for cisplatin resistance were studied using mouse leukemia with acquired resistance to the drug. Uptake of cisplatin by L-1210/DDP and P 388/DDP was decreased, compared with sensitive lines. Glutathione contents in both the resistant lines were 1.7 times more than in the resp. sensitive ones. While glutathione content was reduced to about 10% by incubation of cells with D,L-buthionine-S,R-sulfoximine, sensitivity of the resistant cells remained unchanged. Therefore, glutathione may relate to the mechanism for resistance in these lines. Cross-resistance patterns of L-1210/DDP and P 388/DDP as well as Colon 26/DDP to cisplatin analogs were investigated. Carrier ligands of the analogs, by which antitumor spectra would be controlled, were different from each other and leaving groups were Cl2, as a rule. As a result, L-1210/DDP showed cross-resistance only to two analogs. In contrast, P 388/DDP did so to all complexes tested. The resistance indexes to four analogs were more than 50. Colon 26/DDP also showed cross-resistance to all of them, but the degrees of resistance in this line were lower than those in P 388/DDP. These facts revealed that the pattern of cross-resistance was dependent on each cell line and that completely different patterns were shown by the mouse leukemia resistant lines. It was suggested that in developing a new platinum analog selection of a carrier ligand to which resistant lines lacked cross-resistance was possible.

IT 62863-70-1

RL: BIOL (Biological study)

(cross-resistance of tumor cells to)

RN 62863-70-1 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

AN 1990:145553 CAPLUS

DN 112:145553

TI Dextran complexes as tumor inhibitors and their manufacture

IN Okada, Masafumi; Mori, Fumio; Konishi, Michiko; Miki, Shuji; Kageyu, Akira; Tashiro, Tazuko; Tsukaqoshi, Shiqeru

PA Kuraray Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

-----PI JP 01123803 A2 19890516 JP 1987-281297 19871106

PRAI JP 1987-281297 19871106

OS MARPAT 112:145553

AB Dextran or its salts having OH groups substituted with RSO3PtL1L2Y or RSO3[Pt(H2O)L1L2]Y [L1,L2 = ammine, single coordination amine (L1 and L2 together may form doubly coordinated amine); Y = anionic coordination element; R = divalent hydrocarbyl] and those partially contg. RSO3H groups are useful as tumor inhibitors. Thus, an aq. soln. contg. 1000 mg sulfoethyldextran Na salt and aq. cis-dinitratodiammineplatinum(II) soln. were stirred 12 h in the dark at room temp. to give a complex with Pt content 8.4% and S content 2.9%. The antitumor activity of the complex was demonstrated in mice.

IT 120019-38-7DP, reaction products with sulfoethyldextran RL: PREP (Preparation)

(tumor inhibitors, manuf. of)

RN 120019-38-7 CAPLUS

L13 ANSWER 13 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1990:91783 CAPLUS

DN 112:91783

TI Cis-platinumdiamine complexes, antitumorous compositions containing them, and methods for their preparation

IN Dai, Qianhuan

PA Beijing Polytechnical University, Peop. Rep. China; Xingnong Technique Development Co.

SO Brit. UK Pat. Appl., 55 pp.

CODEN: BAXXDU

DT Patent

LA English

FAN. CNT 1

ran.	CNII				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2209161	A1	19890504	GB 1988-13192	19880603
	GB 2209161	B2	19911002		
	CN 87104027	Α	19881214	CN 1987-104027	19870605
	CN 1016693	В	19920520		
	US 5198564	A	19930330	US 1988-203041	19880606

PRAI CN 1987-104027 19870605

MARPAT 112:91783

Cis-platinumdiamine complexes Ar1Q1N(R1)HPt(Z)2(X)2NH(R2)Q2Ar2 [I; Ar1, AΒ Ar2 = (hetero) arom., or together are a divalent (hetero) arom.; Q1,Q2 = aliph., divalent heterocyclic aliph.; R1, R2 = H, C1-5 alkyl, C1-10 heteroalkyl; or R1 and Q1 and/or R2 and Q2 together with the N are a satd. heterocycle ring; Z = optional OH; X = anionic ligand or part of a dianionic ligand] are prepd. and used in the manuf. of medicaments for treatment of cancer. I (Ar1 = Ar2 = p-ClC6H4; Q1 = Q2 = CH2; R1 = R2 = H; X = Cl; Z = OH) at 10 mg/kg i.p. inhibited L1210 mouse leukemia and S180 sarcoma cells with T/S (ratio of survival time of test and control animals) values of >252 and >260%, resp. Cis-platinum(II) di-(o-chlorobenzyl)amine diiodide was prepd. by heating K2PtCl6 with KI to 70.degree., cooling to room temp., placing in the dark, and then reacting with o-chlorobenzylamine.

IT 125230-29-7P 125230-30-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as neoplasm inhibitor)

RN 125230-29-7 CAPLUS

Platinum, (1,2-diamino-1,2-dihydro-5-acenaphthylenol-N,N')diiodo-, CN (SP-4-3) - (9CI) (CA INDEX NAME)

$$-1 \xrightarrow{\begin{array}{c} 1^{-} & H_{2} \\ Pt & N \end{array}} OH$$

125230-30-0 CAPLUS RN

Platinum, dichloro(1,2-diamino-1,2-dihydro-5-acenaphthylenol-N,N')-, CN (SP-4-3) - (9CI) (CA INDEX NAME)

L13 ANSWER 14 OF 38 CAPLUS COPYRIGHT 2003 ACS

1990:90426 CAPLUS AN

DN 112:90426

Preparation of platinum compounds for the treatment of cancer TΙ

Talebian, Abdolhossen; Green, Diana C.; Hammer, Charles F.; Schein, Philip IN

PA Georgetown University, USA

SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2

GI

	Eng	glish 3					
	PA'	TENT NO.	KIND	DATE		APPLICATION NO.	DATE
PI		8900574 W: AU, JP				WO 1988-US2353	19880718
		RW: AT, BE,	CH, DE	, FR, GB,	IT,	LU, NL, SE	
	US	4895936	Α	19900123		US 1988-143761	19880114
	US	4895935	Α	19900123		US 1988-143762	19880114
	AU	8821230	A1	19890213		AU 1988-21230	19880718
		615937					
	ΕP	376959	A1	19900711		EP 1988-906550	19880718
	ΕP	376959	B1	19930324			
						LI, LU, NL, SE	
						JP 1988-506291	19880718
	JP	2749092	B2	19980513			
	ΑT	87314	E	19930415		AT 1988-906550	19880718
						CA 1988-572280	19880718
PRAI	US	1987-74825		19870717			
	US	1988-143761		19880114			
	US	1988-143762		19880114			
	ΕP	1988-906550		19880718			
	WO	1988-US2353		19880718			
os	MAI	RPAT 112:9042	6				

AB Pt compds. (I-III; n=1, 2; R1=mono- or disaccharide or deriv. thereof; R2, R3=C1-4 alkyl or R2 and R3 together being linked to adjacent C's on a 5- or 6-membered ring) and (IV; n=0, 1; R1=H, mono- or disaccharide or deriv. thereof linked to the N by NHCO, NHCS, CO; R2, R3=H, C1-4

IT

RN

CN

AN

DN

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IT

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CN

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alkyl; or R2 and R3 together being linked to adjacent C's on a 4-, 5- or
    6-membered ring or R2R3 forming a fused or bicyclic ring with adjacent
    C's; R4 = H, C1-4 alkyl; provided that R1 and R4 cannot both be H when n =
    0) useful as anticancer agents, are prepd. Reaction of
    3,4,6-tri-O-acetyl-2-acetamido-2-deoxyglucopyranosyl isothiocyanate with
    aspartic acid in aq. MeCN contg. (iso-Pr)2NEt gave 2-[[(3,4,6-tri-O-
    acetyl) -2-acetamido-2-deoxy-.alpha.-D-glucopyranosyl) amino] thiocarbonyl] am
    ino]butanedioic acid. An aq. soln. of Ba salt of the latter and
    cis-sulfato-1,2-cyclohexanediamine-Pt(II) (prepn. given) was agitated 2 h
    in N in the dark to give (S)-IV [R1 = [(3,4,6-tri-O-acetyl-2-acetamido-2-
    deoxy-.alpha.-D-glucopyranosyl)amino]thiocarbonyl, R2R3 =
    1,2-cyclohexylidene, R4 = H] (V). V at 400 mg/kg showed 76% increased
    life span (ILS) of mice implanted i.p. with 1 .times. 106 P388 leukemia
    cells vs. 96% ILS for cisplatin at 10 mg/kg.
    122681-30-5P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of, as anticancer agent)
    122681-30-5 CAPLUS
    Platinum, (1,2-cyclopentanediamine-N,N')[4-[[thioxo[[3,4,6-tri-O-acetyl-2-
     (acetylamino) -2-deoxy-.alpha.-D-galactopyranosyl]amino]methyl]amino]-1,1-
    cyclohexanedicarboxylato(2-)]-, (SP-4-2)- (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 15 OF 38 CAPLUS COPYRIGHT 2003 ACS
    1989:489322 CAPLUS
    111:89322
    Water-soluble third generation antitumor platinum complexes,
     [2,2-bis(aminomethyl)-1,3-propanediol-N,N']-[1,1-
    cyclobutanedicarboxylato(2-)-O,O']platinum(II) and [1,1-
    cyclobutanedicarboxylato(2-)-0,0'][tetrahydro-4H-pyran-4,4-dimethanamine-
    N,N']platinum(II)
    Bitha, Panayota; Carvajal, Suzanne G.; Citarella, Ronald V.; Child, Ralph
    G.; Delos Santos, Eugenia F.; Dunne, Theresa S.; Durr, Fredrick E.;
    Hlavka, Joseph J.; Lang, S. A., Jr.; et al.
    Lederle Lab., Am. Cyan. Co., Pearl River, NY, 10965, USA
    Journal of Medicinal Chemistry (1989), 32(8), 2015-20
    CODEN: JMCMAR; ISSN: 0022-2623
    Journal
    English
    CASREACT 111:89322
    cis-PtLCl2 (L = 3,3-oxetanedimethanamine (OXTDMA), tetrahydro-4H-pyran-4,4-
    dimethanamine (THPDMA), trans-(+)-tetrahydro-3,4-furandiamine (THFDA),
    2,2-bis(aminomethyl)-1,3-propanediol (BAMPDO), 2,3-diamino-1,4-butanediol
     (DABDO)], cis-[PtL1(CBCD)] [H2CBCD = 1,1-cyclobutanedicarboxylic acid; L1
    = L, 1,1-cyclobutanedimethanamine, 1,1-cyclohexanedimethanamine,
    trans-(+)-1,2-cyclohexanediamine, 2,2-dimethyl-1,3-propanediamine],
    cis-[PtL(O2CCH2CO2)] (L = OXTDMA, THPDMA, THFDA, DABDO), and cis[[PtLQ] (L
    = THPDMA, DAMPDO; H2Q = tetrahydro-4H-pyran-4,4-dicarboxylic acid) were
    prepd. and their stability and antitumor activity detd.
    cis-Pt(BAMPDO)(CBDB)] and cis-Pt(THPDMA)(CBDB)] show the greatest
    antitumor activity. cis-[Pt(OXTDMA)(O2CCH2CO2)] is monoclinic, space
    group Pm, with Z = 2 whereas cis-[Pt(DABDO)(O2CCH2CO2)].H2O is
    orthorhombic, space group Pn21a, Z = 4.
    111263-84-4P 111263-85-5P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
    BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. and antitumor activity of)
    111263-84-4 CAPLUS
    Platinum, [1,1-cyclobutanedicarboxylato(2-)](tetrahydro-3,4-furandiamine-
```

N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 111263-85-5 CAPLUS

CN Platinum, [propanedioato(2-)-0,0'](tetrahydro-3,4-furandiamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

IT 111263-83-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (prepn. and reaction with cyclobutanedicarboxylate and antitumor activity of)

RN 111263-83-3 CAPLUS

- L13 ANSWER 16 OF 38 CAPLUS COPYRIGHT 2003 ACS
- AN 1989:417145 CAPLUS
- DN 111:17145
- TI Synthesis, chemical characterization and biological evaluation of new platinum(II) complexes with 1,2-diaminocyclopentane
- AU Craciunescu, D. G.; Parrondo Iglesias, E.; Doadrio Lopez, A.; Scarcia, V.; Furlani, A.; Ravalico, L.; Ghirvu, C.
- CS Fac. Pharm., Univ. Madrid, Madrid, 28040, Spain
- SO Anales de la Real Academia de Farmacia (1988), 54(4), 613-21 CODEN: ARAFAY; ISSN: 0034-0618
- DT Journal
- LA English
- AB Of the 3 Pt(II) complexes contg. 1,2-diaminocyclopentane prepd., the complex contg. 2-nitroterephthalic acid was most active against tumor

cells in vitro and in vivo, whereas the complexes contg. terephthalic acid and 2,3-dinitroterephthalic acid were less active. None of the complexes were active against Trypanosoma infections at nontoxic doses. The antileukemic activity of the complexes was correlated with .pi. electronic charges placed over the O- atoms of the leaving ligand carboxylic groups, the most effective complexes having the highest charges. The complexes appeared to have low nephrotoxicity.

IT 121276-90-2P 121323-59-9P 121323-60-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and neoplasm-inhibiting activity against human and lab. animal cells and trypanosomicidal activity of)

RN 121276-90-2 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [2-nitro-1,4benzenedicarboxylato(2-)-01]- (9CI) (CA INDEX NAME)

RN 121323-59-9 CAPLUS

CN Platinum, [1,4-benzenedicarboxylato(2-)-0](1,2-cyclopentanediamine-N,N')-(9CI) (CA INDEX NAME)

RN 121323-60-2 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[2,3-dinitro-1,4-benzenedicarboxylato(2-)-O1]- (9CI) (CA INDEX NAME)

IT 107675-97-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction with terephthalic acids of)

RN 107675-97-8 CAPLUS

CN Platinum(2+), diaqua(1,2-cyclopentanediamine-N,N')-, (SP-4-2)- (9CI) (CA INDEX NAME)

L13 ANSWER 17 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1989:237128 CAPLUS

DN 110:237128

TI Preparation of pullulan and platinum complexes as neoplasm inhibitors

IN Mori, Fumio; Okada, Masafumi; Miki, Shuji; Ebashi, Iwao; Nishida, Takashi; Kawai, Kouichiro; Tashiro, Tazuko; Tsukagoshi, Shigeru

PA Kuraray Co., Ltd., Japan

SO PCT Int. Appl., 134 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 2

1.174.	C14 T	4				
	PA	TENT NO.	KIND DATE		APPLICATION NO.	DATE
ΡI	WO	8707142	A1 19871203		WO 1987-JP322	19870520
		W: AU, DK,	FI, JP, KR, NO,	SU,	US	
		RW: AT, BE,	CH, DE, FR, GB,	IT,	LU, NL, SE	
	ΑU	8774814	A1 19871222		AU 1987-74814	19870520
	ΕP	270682	A1 19880615		EP 1987-903416	19870520
		R: AT, BE,	CH, DE, FR, GB,	IT,	LI, LU, NL, SE	
	US	4948784	A 19900814		US 1988-163961	19880120
	US	5100877	A 19920331		US 1988-282398	19881205
PRAI	JP	1986-117969	19860521			
	JP	1987-52273	19870306			
	WO	1987-JP322	19870520			
	US	1988-163961	19880120			
	JP	1988-243616	19880927			
GI						

$$\begin{array}{c|c} \text{pullulan} - \overset{\text{O}}{\underset{\text{O}}{\text{SO}}} & \text{pt} & \overset{\text{NH}}{\underset{\text{OH}_2}{\text{NH}}} & \text{NO}_3^{-} \\ \end{array}$$

Pullulan complexes are prepd. as neoplasm inhibitors by first activating pullulan by sulfation, phosphorylation, sulfonation, etc. and then by treating the products with Pt compds. Na pullulan sulfate (pullulan mol. wt. 120 .times. 103) was dissolved in H2O, mixed with an aq. soln. of cis-dinitrato-trans-1,2-diaminocyclohexane-Pt(II), and stirred overnight. The soln. was dialyzed 2 days, centrifuged to eliminate a small amt. of insol. materials, and the remaining soln. was freeze-dried to give

complexes I and II. The Pt content of the complexes is 9.6% by wt., and the S content 3.4%. Many analogs of I and II were similarly prepd. For a pharmaceutical formulation, an injection soln. was prepd. by dissolving 400 mg cis-hydrogencarbonato(1,2-diaminocyclohexane) Pt(II) sulfoethyl pullulan complexes in 40 mL H2O and filtering the soln. through a micropore membrane. cis-Nitrato(1,2-diaminocyclohexane)Pt(II) carboxymethyl pullulan complexes injected at 50 mg/kg into mice bearing Colon-26 cancer cells decreased the size of the tumor by about 50% in 12 days.

IT 83059-01-2 120019-38-7

RL: BIOL (Biological study)

(condensation of, with pullulan salts for neoplasm inhibitor prepn.)

RN 83059-01-2 CAPLUS

CN Platinum, dichloro[rel-(1R,2S)-1,2-cyclopentanediamine-.kappa.N,.kappa.N']-, (SP-4-3)- (9CI) (CA INDEX NAME)

RN 120019-38-7 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')bis(nitrato-O)-, [SP-4-3-(cis)]- (9CI) (CA INDEX NAME)

L13 ANSWER 18 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1989:141540 CAPLUS

DN 110:141540

TI Preparation and formulation of anticancer agents containing cis-dichloro-trans-dihydroxo (2-aminomethyl pyrrolidine)platinum(II)

IN Morikawa, Kazumi; Honda, Narimitsu; Endo, Koichi

PA Chugai Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 63010725 A2 19880118 JP 1987-54139 19870311

PRAI JP 1986-53348 19860311

GI

Ι

AB The title compd. (I) and anticancer agents contg. I were prepd. Platinum(II) potassium chloride (0.01 mol) was dissolved in 100 mL H2O. After removing some insol. matter 0.011 mol 2-aminomethylpyrrolidine in 10 mL H2O was added and the soln. was stirred at room temp. for 1 day. A solid formed was removed by filtration and dried in vacuo at 60.degree. for 3 h to give 82% cis-dichloro(2-aminomethylpyrrolidine)platinum(II). To a suspension of 0.005 mol the latter compd. 40 mL 31% H2O2 was added with stirring and the mixt. was allowed to react at room temp. for 30 min and at 80.degree. for 1 h. The solid formed was removed by filtration and was dried at 60.degree. for 3 h to give 35% I. I at 120 mg/kg i.p. inhibited 91% the growth of colon 26 carcinoma transplanted in mice while cisplatin at 12 mg/kg showed 79% inhibition of the tumor growth, but at 16 mg/kg fatality occurred due to toxicity. Tablets were prepd. from I 50, lactose 96, cryst. cellulose 27, corn starch 5, and magnesium stearate 2g to give a tablet weighing 180mg.

IT 83059-01-2P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and oxidn. of)

RN 83059-01-2 CAPLUS

Platinum, dichloro[rel-(1R,2S)-1,2-cyclopentanediamine-.kappa.N,.kappa.N']-CN , (SP-4-3) - (9CI) (CA INDEX NAME)

L13 ANSWER 19 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1988:503636 CAPLUS

DN 109:103636

ΤI Preparation of cis-platinum(II) complexes containing phospholipid as antitumor agents

IN Nagai, Takashi; Miyokan, Isao; Kitayama, Isao; Funaki, Takashi; Tabiie, Nobuhisa; Miyahara, Maki; Hori, Takako

PΔ Toyama Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

Patent DT

Japanese LA

FAN.	CNT 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 62298597	A2	19871225	JP 1986-142160	19860618
	JP 07053745	B4	19950607		
PRAI	JP 1986-142160		19860618		
OS GT	CASREACT 109:103	636			

The title compds. [I; A1, A2 = ammine, (substituted) alkylamine, AB cycloalkylamine; or A1A2 = bidentate amine; R1 = H, fatty acid residue], useful as antitumor agents, are prepd. H2C[CO2CHPh2]2 was hydroxymethylated with HCHO to give diol II (R1 = R2 = H, R3 = CHPh2) which was acylated with stearic acid to give monoester II [R1 = Me(CH2)16CO, R2 = H, R3 = CHPh2] which was esterified with BrCH2CH2OPCl2 to give bromoethyl phosphate II [R1 = Me(CH2)16CO, R2 = (HO)P(O)OCH2CH2Br, R3 = CHPh2] (III). III was quaternized with Me3N to give trimethylammonioethyl phosphate II [R1 = Me(CH2)16CO, R2 = (O-)P(O)OCH2CH2N+Me3, R3 = CHPh2] hydrate which was then deprotected to give dicarboxylic acid II [R1 = Me(CH2)16CO, R2 = (O-)P(O)OCH2CH2N+Me3, R3 = H] hydrate which (389 mg) in water at pH 6-7 was stirred with addn. of aq. cis-Pt(NH3)2(NO3)2 in darkness for 2 h to give Pt complex cis-I [A1 = A2 = NH3, R1 = Me(CH2)16CO]. Sep. prepd. cis-I [A1A2 = trans-dl-1,2-diaminocyclohexane, R1 = Ac] showed IC50 of 0.31 .mu.g/mL against L-1210 tumor cells in RPMI-culture, increased the survival rate to >190% at 11.5 .mu.mol/kg in mice having ascite tumor, and LD50 of 80 mg/kg i.p. in mice, vs. 0.48 .mu.g/mL, >168% at 10.0 .mu.mol/kg, and 14 mg/kg, resp., for cisplatin.

IT 115927-53-2P 116002-92-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of racemic, as antitumor agent)

RN 115927-53-2 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[7,7-dicarboxy-4-hydroxy-N,N,Ntrimethyl-10-oxo-3,5,9-trioxa-4-phosphaheptacosan-1-aminium
4-oxidato(3-)]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN 116002-92-7 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[7,7-dicarboxy-4-hydroxy-N,N,N-trimethyl-10-oxo-3,5,9-trioxa-4-phosphaheptacosan-1-aminium 4-oxidato(3-)]-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

IT 62863-70-1

RL: PROC (Process)

(substitution of, with malonate derivs.)

RN 62863-70-1 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

L13 ANSWER 20 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1987:648993 CAPLUS

DN 107:248993

Platinum complexes with sterically demanding ligands: trans-bis(2,7-diazatetracyclo[6.3.0.04,9.05,11]undecane-N,N')platinum(II) dichloride tetrahydrate

AU Brown, B. E.; Faggiani, R.; Hughes, D.; Lock, C. J. L.

CS Lab. Inorg. Med., McMaster Univ., Hamilton, ON, L8S 4M1, Can.

SO Canadian Journal of Chemistry (1987), 65(12), 2855-9 CODEN: CJCHAG; ISSN: 0008-4042

DT Journal

LA English

AB trans-[PtL2]Cl2.4H2O (I; L = 2,7-diazatetracyclo[6.3.0.0.4,905,11]undecane ) was isolated from a reaction mixt. contg. K2[PtCl4] and L. I was analyzed using elemental anal., NMR spectroscopy, and x-ray crystallog. I crystd. in the triclinic system, space group P.hivin.1, a 9.437(1), b 9.9751(1), c 6.888(1) .ANG., .alpha. 109.54(1), .beta. 109.71(1), .gamma. 93.63(1).degree., Z = 1, R = 0.0310 and Rw = 0.0408. The Pt resides on an inversion center and is coordinated to the N atoms of the secondary amines. The chelating N-Pt-N angle is 79.degree. but otherwise the bond lengths and angles agree well with values for similar structures.

IT 111546-33-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and crystal structure and NMR of)

RN 111546-33-9 CAPLUS

CN Platinum(2+), bis[octahydro-6,3,5-(iminoethanylylidene)cyclopenta[b]pyrrole-N1,N7]-, dichloride, tetrahydrate, (SP-4-2)- (9CI) (CA INDEX NAME)

CN

(9CI) (CA INDEX NAME)

O2 C1-

O4 H<sub>2</sub>O

```
L13
    ANSWER 21 OF 38 CAPLUS COPYRIGHT 2003 ACS
     1987:627936 CAPLUS
AN
DN
     107:227936
     Preparation of tetrahydro-3,4-furandiamine platinum complexes and related
ΤI
     compounds as antitumor agents
     Bitha, Panayota; Child, Ralph Grassing; Hlavka, Joseph John; Lin, Yang I.
IN
     American Cyanamid Co., USA
PA
     Eur. Pat. Appl., 32 pp.
so
     CODEN: EPXXDW
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO.
                                                            DATE
                     ----
                            -----
                                           ------
PΙ
    EP 237829
                      A2
                            19870923
                                           EP 1987-102447
                                                            19870220
     EP 237829
                      Α3
                            19880107
     EP 237829
                      В1
                            19901031
        R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE
     US 4716157
                                           US 1986-841647
                      Α
                            19871229
                                                            19860320
     AT 57933
                      E
                            19901115
                                           AT 1987-102447
                                                            19870220
     CA 1282060
                                           CA 1987-532301
                      A1
                            19910326
                                                            19870318
     JP 62289591
                                           JP 1987-64417
                      A2
                            19871216
                                                            19870320
PRAI US 1986-841647
                            19860320
     EP 1987-102447
                            19870220
GI
     For diagram(s), see printed CA Issue.
AΒ
     Title compds. I (A = O, SO2, NR; R = C1-5 alkyl COR; n, m = 1-3, L, L1 =
     halo, NO3, SO4, carboxylate; LL1 = ascorbate, decarboxylate; X = OH, halo)
     are prepd. as antitumor agents. An aq. soln. of trans-(racemic)-
     tetrahydro-3,4-furandiamine (prepn. given) was added to aq. K2PtCl4 to
     ppt. 4.4 g (trans-tetrahydro-3,4-furandiamine)platinum dichloride, which
     was comparable to cisplatin in effectiveness against a variety of cancers;
     however, this effectiveness was often at much higher dosages.
IT
     111263-83-3P 111263-84-4P 111263-85-5P
     111263-86-6P 111263-87-7P 111263-88-8P
     111263-89-9P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of, as antitumor agents)
RN
     111263-83-3 CAPLUS
```

Platinum, dichloro(tetrahydro-3,4-furandiamine-N,N')-, [SP-4-2-(trans)]-

RN 111263-84-4 CAPLUS

CN Platinum, [1,1-cyclobutanedicarboxylato(2-)](tetrahydro-3,4-furandiamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 111263-85-5 CAPLUS

CN Platinum, [propanedioato(2-)-0,0'] (tetrahydro-3,4-furandiamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 111263-86-6 CAPLUS

CN Platinum, tetrachloro(tetrahydro-3,4-furandiamine-N,N')-, [OC-6-22-(trans)]- (9CI) (CA INDEX NAME)

RN 111263-87-7 CAPLUS

CN Platinum, bis(hydroxyacetato-O1)(tetrahydro-3,4-furandiamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 111263-88-8 CAPLUS

CN Platinum, dichloro(tetrahydro-3,4-thiophenediamine 1,1-dioxide-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 111263-89-9 CAPLUS

L13 ANSWER 22 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1987:417331 CAPLUS

DN 107:17331

On the synthesis, and cytostatic and antitumor properties of new platinum(II) complexes with 1,2-diaminocyclopentane

AU Craciunescu, D. G.; Scarcia, V.; Furlani Candiani, A.; Doadrio, A.; Ghirvu, C.; Ravalico, L.

CS Dep. Inorg. Anal. Chem., Fac. Pharm., Madrid, Spain

SO Journal de Pharmacie de Belgique (1986), 41(5), 286-92 CODEN: JPBEAJ; ISSN: 0047-2166

DT Journal

LA English

AB Pt(II) complexes with 1,2-diaminocyclopentane and various bidentate leaving ligands such as nitrophthalate, isophthalate, sulfophthalate, or carboxyphthalates and carboxyisophthalates were prepd. and characterized. The leaving ligand mols. appear to bond to Pt(II) through their carboxylic groups. The 4-nitrophthalate, isophthalate, and 5-sulfoisophthalate complexes showed cytostatic properties against KB cell growth but were 5-10-fold less effective than cisplatin. The highest antitumor activity against P388 and .alpha. 1210 leukemia in mice was obsd. with isophthalate derivs. The antitumor activities of the complexes was correlated to .pi. electronic changes placed over the O- atoms of the leaving ligand

۲,

carboxylate groups, the most effective complexes having the highest changes.

TT 107675-94-5P 107675-95-6P 107878-13-7P 107959-52-4P 108224-31-3P 108447-88-7P 108812-35-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and antitumor and cytostatic properties of)

RN 107675-94-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [4-nitro-1,2-benzenedicarboxylato(2-)-01,02]-, (SP-4-3)- (9CI) (CA INDEX NAME)

RN 107675-95-6 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[3-nitro-1,2-benzenedicarboxylato(2-)-01,02]-, (SP-4-3)- (9CI) (CA INDEX NAME)

RN 107878-13-7 CAPLUS

CN Platinate(1-), [1,2,4-benzenetricarboxylato(3-)-01,02](1,2-cyclopentanediamine-N,N')-, hydrogen, (SP-4-3)- (9CI) (CA INDEX NAME)

● H+

RN 107959-52-4 CAPLUS

CN Platinate(1-), [1,2,3-benzenetricarboxylato(3-)-01,02](1,2-cyclopentanediamine-N,N')-, hydrogen, (SP-4-3)- (9CI) (CA INDEX NAME)

● H+

RN 108224-31-3 CAPLUS

CN Platinum, [1,3-benzenedicarboxylato(2-)-0](1,2-cyclopentanediamine-N,N')-(9CI) (CA INDEX NAME)

RN 108447-88-7 CAPLUS

CN Platinate(1-), [1,3,5-benzenetricarboxylato(3-)-0](1,2-cyclopentanediamine-N,N')-, hydrogen (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{Pt} & \text{Pt} & \text{Pt} \\
 & \text{N} & \text{N} & \text{CO}_2
\end{array}$$

● H+

RN 108812-35-7 CAPLUS

CN Platinate(1-), (1,2-cyclopentanediamine-N,N')[5-sulfo-1,3-benzenedicarboxylato(3-)-01]-, hydrogen (9CI) (CA INDEX NAME)

● H+

IT 107675-98-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with phthalate ligands)

RN

107675-98-9 CAPLUS Platinum(2+), diaqua(1,2-cyclopentanediamine-N,N')-, (SP-4-2)-, dinitrate CN(9CI) (CA INDEX NAME)

CM 1

107675-97-8 CRN

CMF C5 H16 N2 O2 Pt

CCI CCS

CM 2

CRN 14797-55-8

CMF N O3

IT 62863-70-1

> RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with silver nitrate and water)

62863-70-1 CAPLUS RN

Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(trans)]- (9CI) CN(CA INDEX NAME)

ANSWER 23 OF 38 CAPLUS COPYRIGHT 2003 ACS L13

1986:502590 CAPLUS AN

105:102590 DN

ΤI Antitumor and antimicrobial platinum complexes

Totani, Tetsushi; Shiratori, Osamu; Aono, Katsutoshi; Uchida, Naomi IN

Shionogi and Co., Ltd., Japan PA

Eur. Pat. Appl., 68 pp. SO

CODEN: EPXXDW

DT Patent

English LA

FAN.CNT 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 166366	A2	19860102	EP 1985-107573	19850619
EP 166366	A3	19860326		
EP 166366	B1	19890419		
R: CH, DE,	FR, IT	, LI, NL		
JP 61007283	A2	19860113	JP 1984-126845	19840620
US 4658048	A	19870414	US 1985-741890	19850606
GB 2160867	A1	19860102	GB 1985-15326	19850617
GB 2160867	B2	19880323		
CA 1267411	A1	19900403	CA 1985-484703	19850620
PRAI JP 1984-126845		19840620		
GI				

Pt complexes (I) where R = H, Ph, or lower alkyl, X and Y = NH3 or lower AΒ alkylamine or XY = a diamine, and Z = halogen, OH or OM (M = metal salt) are prepd. by reacting a corresponding Pt(II) complex with H2O2 or halogen. I have potent antitumor and antibacterial activities and have high H2O soly., so they can be administered parenterally in appropriate injection solvents. I (R = H, X = Y = NH3, Z = OH) (II) was prepd. by treatment of glycolato-O,O'-diammineplatinum(II) with 10% aq. H2O2. II, I(R = H, X = Y = NH3, Z = C1), I(R = H, XY = H2NCH2CH2NH2, Z = OH) and I(R = H, XY = trans-cyclohexane-1,2-diamine, Z = OH) showed curative indexes 2-8 times larger than that of cisplatin in rats inoculated with Walker carcinosarcoma 256.

81427-45-4 IT

> RL: PRP (Properties) (anion exchange of)

RN81427-45-4 CAPLUS

CNPlatinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')bis(nitrato-0)-, [SP-4-3-(exo, exo)] - (9CI) (CA INDEX NAME)

IT 103456-24-2P 103456-56-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with hydrogen peroxide or halogens)

RN 103456-24-2 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')[2,3-dihydroxypropanoato(2-)-O1,O2]-, [SP-4-4-(exo,exo)]- (9CI) (CA INDEX NAME)

RN 103456-56-0 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')[3-chloro-2-hydroxypropanoato(2-)-01,O2]-, [SP-4-4-(exo,exo)]- (9CI) (CA INDEX NAME)

IT 87133-20-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with hydroxy acids)

RN 87133-20-8 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')dihydroxy-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

IT 103456-16-2P 103456-17-3P 103474-49-3P

RL: PREP (Preparation)

(prepn. of, for antitumor or antibacterial pharmaceuticals)

RN 103456-16-2 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')dihydroxy[hydroxyacetato (2-)-O1,O2]-, [OC-6-54-(exo,exo)]- (9CI) (CA INDEX NAME)

RN 103456-17-3 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')[3-chloro-2-hydroxypropanoato(2-)-O1,O2]dihydroxy-, [OC-6-54-(exo,exo)]- (9CI) (CA INDEX NAME)

RN 103474-49-3 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')[2,3-dihydroxypropanoato(2-)-O1,O2]dihydroxy-, [OC-6-54-(exo,exo)]- (9CI) (CA INDEX NAME)

IT 92389-98-5

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with hydrogen peroxide or halogens)

RN 92389-98-5 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N') [hydroxyacetato(2-)-01,02]-, [SP-4-4-(exo,exo)]- (9CI) (CA INDEX NAME)

L13 ANSWER 24 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1984:563710 CAPLUS

DN 101:163710

TI Glycolic acid platinum complexes

IN Totani, Tetsushi; Aono, Katsutoshi; Komura, Michihiro

PA Shionogi and Co., Ltd., Japan

SO Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

FAN. CNT	. 1				
PA	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP	112591	A1	19840704	EP 1983-201741	19831208
EP	112591	B1	19860611		
	R: BE, CH,	DE, FR	, IT, LI, NL,	SE	
JP	59112995	A2	19840629	JP 1982-225272	19821221
JP	02051918	B4	19901108		
US	4560781	Α	19851224	US 1983-552906	19831117
GB	2132201	<b>A1</b>	19840704	GB 1983-33715	19831219
GB	3 2132201	B2	19860514		
CA	1186307	A1	19850430	CA 1983-443806	19831220
PRAI JP GI	1982-225272		19821221		

AB Novel water-sol. glycolic acid-platinum complexes I (X and Y = straight or branched alkylamines; X, Y = ethylenediamine, 1,2-diaminocyclohexane, etc.) are prepd. by treatment of dinitrate-platinum amines with anion exchange resins followed by reaction with glycolic acid. I were effective inhibitors of L1210 leukemia in mice with potency greater than cisplatin.

P2389-98-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as neoplasm inhibitor)

RN 92389-98-5 CAPLUS
CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')[hydroxyacetato(2-)-01,02]-, [SP-4-4-(exo,exo)]- (9CI) (CA INDEX NAME)

- L13 ANSWER 25 OF 38 CAPLUS COPYRIGHT 2003 ACS
- AN 1984:150742 CAPLUS
- DN 100:150742
- TI Antitumor activity of platinum(II) complexes of 1,2-diaminocylopentane isomers
- AU Noji, Masahide; Goto, Masafumi; Kidani, Yoshinori
- CS Fac. Pharm. Sci., Nagoya City Univ., Nagoya, 467, Japan
- SO Journal of Clinical Hematology and Oncology (1984), 14(1), 9-16 CODEN: JCHODP; ISSN: 0162-9360

DT Journal

LA English

AB Pt(II) complexes of 1,2-diaminocyclopentane (dacp) optical isomers were synthesized and they showed relatively high antitumor activity against leukemia P388. The antitumor activity depended upon the optical isomers involved and it was noticed that Pt(II) complexes of 1R,2R-dacp exhibited higher activity than those of 1S,2S-isomer. The chelate ring conformations of Pt(II) complexes contg. 1R,2R- and 1S,2S-isomers were estd. to be .lambda.-gauche and .delta.-gauche forms, resp., by analyzing their CD spectra.

TT 77130-42-8P 77130-44-0P 77171-89-2P 77171-90-5P 77171-91-6P 77398-23-3P

77398-24-4P 77398-64-2P 77398-67-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and neoplasm inhibition by)

RN 77130-42-8 CAPLUS

CN Platinum, dibromo(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77130-44-0 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')bis(nitrato-0)-, [SP-4-2-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77171-89-2 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77171-90-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [sulfato(2-)-O,O']-, [SP-4-2-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77171-91-6 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [ethanedioato(2-)-O,O']-, [SP-4-2-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77398-23-3 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 77398-24-4 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [sulfato(2-)-O,O']-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 77398-64-2 CAPLUS

CN Platinum, dibromo(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(1R-trans)](9CI) (CA INDEX NAME)

RN 77398-67-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')bis(nitrato-0)-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

L13 ANSWER 26 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1983:522831 CAPLUS

DN 99:122831

TI Bicycloheptaneplatinum complexes

PA Shionogi and Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

L'ETA	CNII					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	JP 58079933	A2	19830513	JP 1981-178190	19811105	
PRAI	JP 1981-178190		19811105			
GT						

AB The title compds., exo-cis- or -trans-I [R = hydroxyalkyl, (CmH2mOm-1)--OH, -CHO, where m = 1-6] were prepd. Thus, treatment of 100 mL aq. soln. of 20 g II with Diaion SA 20 A (OH- type) gave an aq. soln. of III, which was treated with 871 mg glucuronic acid at 3.degree. overnight to give 2.5 g I (R = Q) (IV). IV at 10 mg/kg showed 20% inhibition of growth of implanted B-16 melanoma cells.

IT 81427-45-4

RL: RCT (Reactant); RACT (Reactant or reagent)
 (hydroxylation of)

RN 81427-45-4 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')bis(nitrato-0)-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

IT 87134-48-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and antitumor activity of)

RN 87134-48-3 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N') (D-glucuronato-06)hydroxy-, [SP-4-4-(exo,exo)]- (9CI) (CA INDEX NAME)

IT 87133-20-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and esterification with glucuronic acid)

RN 87133-20-8 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')dihydroxy-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

- L13 ANSWER 27 OF 38 CAPLUS COPYRIGHT 2003 ACS
- AN 1983:400530 CAPLUS
- DN 99:530
- TI Complexes of square planar platinum(II) compounds and N-methylglucamine
- IN Turkevich, John; Burchenal, Joseph H.
- PA Research Corp. , USA
- SO U.S., 9 pp. CODEN: USXXAM

DT Patent LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	US 4376782	A	19830315	US 1980-151976	19800521		
	CA 1177071	A1	19841030	CA 1981-383570	19810810		
PRAI	US 1980-151976		19800521				

AB Complexes or salts of square planar Pt(II) compds. with N-methylglucamine (NMg), prepd. by solubilizing a Pt(II) compd. with NMG in an aq. medium, are effective antitumor agents. Thus, heating 100 mg cis-malonato-1,2-diaminocyclohexaneplatinum(II) with 200 mg NMG in 25 mL H2O at 50.degree. for 4-8 h with frequent stirring increased the soly. of the Pt compd. >40-fold and increased its therapeutic effectiveness 10-fold in leukemic mice, with no apparent change in therapeutic index. Maximal activity was noted with a Pt/NMG mole ratio of 1:2.

IT 62863-70-1DP, methylglucamine complex
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and neoplasm-inhibiting activity of)

RN 62863-70-1 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

L13 ANSWER 28 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1983:62468 CAPLUS

DN 98:62468

TI Electronic and resonance Raman spectra of mixed-valence, linear-chain complexes of platinum and palladium with 1,2-diaminocycloalkanes (N-N), [M(II)(N-N)2][M(IV)(N-N)2X2]X4 (X = halogen)

AU Clark, Robin J. H.; Kurmoo, Mohamedally; Mountney, David N.; Toftlund,

CS Christopher Ingold Lab., Univ. Coll., London, WC1H 0AJ, UK

SO Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1972-1999) (1982), (9), 1851-60
CODEN: JCDTBI; ISSN: 0300-9246

DT Journal

LA English

AB The electronic and resonance Raman spectra of the halogen-bridged, linear-chain, mixed-valance complexes [PtL2] [PtL2X2] X4 (L = 1,2-diaminocyclohexane; X = Cl, Br, I), and of [PdL2] [PdL2Cl2] Cl4 and [Pt(L1)2] [Pt(L1)2Br2Br4 (L1 = 1,2-diaminocyclopentane) were recorded at .apprx.295, 80, and 10 K. Excitation within the contours of the axially polarized M(IV) .rarw. M(II) intervalence band of each complex leads to the appearance of long overtone progressions v1.nu.1 in the resonance Raman spectrum, where .nu. is the totally sym. axial M-X stretching mode. The excitation profile of the .nu.1 band maximizes in each case on the low-energy side of the intervalence band max. The wavenos. of the .nu.1 band, intervalence band max., and excitation profile max. of the complexes decrease in the order Cl > Br > I, Pt > Pd, and L > L1. The mixed-valence complexes form as mixts. of conformational isomers unless the resolved

ligand is used in their prepn. Such conformers have different intervalence band max. and different .nu.1 values and, in consequence, as the exciting-line waveno. is changed, different conformers have their .nu.1 bands resonance-enhanced, and the apparent value of .nu.1 and its overtones changes. This is discussed with ref. to the steric hindrance between the cycloalkane rings in mixed-valence linear-chain complexes.

IT 84236-74-8 84366-43-8 84366-44-9

RL: PRP (Properties)

(electronic and resonance Raman spectra of)

RN 84236-74-8 CAPLUS

CN Platinum(2+), bis(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(cis),(cis)]-, [OC-6-13-(cis),(cis)]-dibromobis(1,2-cyclopentanediamine-N,N')platinum(2+) bromide (1:1:4) (9CI) (CA INDEX NAME)

CM 1

CRN 84236-73-7 CMF C10 H24 N4 Pt CCI CCS

CM 2

CRN 84180-44-9

CMF C10 H24 Br2 N4 Pt

CCI CCS

RN 84366-43-8 CAPLUS

CN Platinum(2+), bis(1,2-cyclopentanediamine-N,N')-, [S-4-1-(1R-trans),(1R-trans)]-, [OC-6-12-(1R-trans),(1R-trans)]-dibromobis(1,2-cyclopentanediamine-N,N')platinum(2+) bromide (1:1:4) (9CI) (CA INDEX NAME)

CM 1

CRN 84366-42-7

CMF C10 H24 N4 Pt

CCI CCS

CM 2

CRN 84275-90-1

CMF C10 H24 Br2 N4 Pt

CCI CCS

RN 84366-44-9 CAPLUS

CN Platinum(2+), bis(1,2-cyclopentanediamine-N,N')-, [SP-4-1-(1R-trans),(1R-trans)]-, [OC-6-12-(1R-trans),(1R-trans)]-bis(1,2-cyclopentanediamine-N,N')diiodoplatinum(2+) iodide (1:1:4) (9CI) (CA INDEX NAME)

CM 1

CRN 84366-42-7 CMF C10 H24 N4 Pt

CCI CCS

CM 2

CRN 84206-62-2

CMF C10 H24 I2 N4 Pt

CCI CCS

L13 ANSWER 29 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1982:555285 CAPLUS

DN 97:155285

TI Carbon-13 nuclear magnetic resonance studies on platinum(II) complexes of alicyclic 1,2-diamines

AU Lind, Trille; Toftlund, Hans

CS Dep. Chem., Univ. Odense, Odense, DK-5230, Den.

SO Acta Chemica Scandinavica, Series A: Physical and Inorganic Chemistry (1982), A36(6), 489-94
CODEN: ACAPCT; ISSN: 0302-4377

DT Journal

LA English

As series of new cis-diammine (diamine) platinum (II) chlorides, where the diamines are 7 different 1,2-cycloaliph. diamines, were prepd., and the 13C NMR spectra were obtained. 13C chem. shifts resemble those of the diamine dihydrochlorides with a ca. 10 ppm downfield shift of C(a) due to the Pt binding. 2JPNC In the chelate rings varies from 0 to 13.5 Hz, increasing with the strain in the chelate ring. 3JPtNCC Values of 0 to 53.7 Hz were obtained. From these data and the relevant x-ray crystal data a Karplus-type dependence was found for 3JPtNCC = 54 cos2 .vphi. where .vphi. is the dihedral angle Pt-N-C-C.

IT 82915-33-1P 83058-97-3P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and carbon-13 NMR of)

RN 82915-33-1 CAPLUS

CN Platinum(2+), diammine(1,2-cyclopentanediamine-N,N')-, dichloride, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

O2 C1-

RN 83058-97-3 CAPLUS

# ●2 Cl-

IT 62863-70-1 83059-01-2

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with ammonia, diammine complex from)

RN 62863-70-1 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 83059-01-2 CAPLUS

CN Platinum, dichloro[rel-(1R,2S)-1,2-cyclopentanediamine-.kappa.N,.kappa.N']-, (SP-4-3)- (9CI) (CA INDEX NAME)

L13 ANSWER 30 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1982:162946 CAPLUS

DN 96:162946

TI Organoplatinum complexes with antitumor activity

IN Totani, Tetsushi; Yamaguchi, Kenji

PA Shionogi and Co., Ltd., Japan

SO Fr. Demande, 19 pp.

CODEN: FRXXBL

DT Patent

LA French

EAN CHT 1

FAN.	CNT 1						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
		<del>-</del> -					
ΡI	FR 2481696 .	A1	19811106	FR 1981-7932	19810421		
	JP 56154493	A2	19811130	JP 1980-58359	19800430		
	US 4359425	Α	19821116	US 1981-249455	19810331		
	GB 2074567	Α	19811104	GB 1981-10578	19810403		
	DE 3117216	A1	19820304	DE 1981-3117216	19810430		
PRA1	I JP 1980-58359		19800430				

GΙ

$$\begin{array}{c|c} & & & & \\ & & & & \\ \hline \\ NH_2 & Pt \\ R & & & \\ \hline \\ NH_2 & I & X \\ \end{array}$$

Diamine complexes I (R = halide, nitrate, sulfonato, monocarboxylato, sulfato, dicarboxylato) were prepd. from (exo,cis-2,3-diaminobicyclo[2.2.1]heptane diacetate and K2PtCl4 to give I (R = Cl) (II), followed by treatment of II or I (R = NO3) with the appropriate reagents. In this way were prepd. I (R = O2CCH2Cl, O2CCH2OH, D-glucuronato; RR = OSO3, O2CCH2CO2, O2CCO2, X). Several I showed powerful activity against leukemia in mice.

IT 81427-46-5P 81427-47-6P 81427-50-1P 81427-52-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and antitumor activity of)

RN 81427-46-5 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')[sulfato(2-)-0,0']-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \circ & \circ \\
 & \downarrow \\
 &$$

RN 81427-47-6 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')[propanedioato(2-)-0,0']-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

81427-50-1 CAPLUS

RN

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')[ethanedioato(2-)-0,O']-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

RN 81427-52-3 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')bis(D-glucuronato-06)-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

IT 81427-48-7P 81427-49-8P 81427-51-2P

RN 81427-48-7 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')bis(chloroacetato-0)-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

RN 81427-49-8 CAPLUS

CN Platinate(1-), [1,2,3-benzenetricarboxylato(3-)O1,O2](bicyclo[2.2.1]heptane-2,3-diamine-N,N')-, hydrogen,
[SP-4-4-(exo,exo)]- (9CI) (CA INDEX NAME)

RN 81427-51-2 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')bis(hydroxyacetato-O1)-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

IT 81427-44-3P 81427-45-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn., antitumor activity, and reactions of)

RN 81427-44-3 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')dichloro-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

RN 81427-45-4 CAPLUS

CN Platinum, (bicyclo[2.2.1]heptane-2,3-diamine-N,N')bis(nitrato-0)-, [SP-4-3-(exo,exo)]- (9CI) (CA INDEX NAME)

L13 ANSWER 31 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1981:473415 CAPLUS

DN 95:73415

TI Relative therapeutic efficacy of platinum complexes against the advanced B16 melanoma in mice

AU Speer, Robert J.; Storey, Charles J.; Hall, Larry M.; Ridgway, Helen J.

CS Dep. Chem., Wadley Inst. Mol. Med., Dallas, TX, 75235, USA

SO Journal of Clinical Hematology and Oncology (1981), 11(2), 47-53 CODEN: JCHODP; ISSN: 0162-9360

DT Journal

LA English

GΙ

AB Eighteen platinum coordination complexes were tested for their therapeutic efficacy against an advanced B16 melanoma in mice. Only malonato trans-(-)-1,2-diaminocyclohexane platinum (II) (I) [61848-65-5] with superior to cisplatin. This complex may warrant consideration in phase II clin. trials against slow-growing, solid tumors in man.

IT 62863-67-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antitumor activity of)

RN 62863-67-6 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[propanedioato(2-)-O,O']-,
[SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

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ANSWER 32 OF 38 CAPLUS COPYRIGHT 2003 ACS
AN
     1981:400706 CAPLUS
DN
     95:706
ΤI
    Platinum complexes as neoplasm inhibitors
    Kitani, Yoshinori, Japan
PΑ
     Jpn. Kokai Tokkyo Koho, 8 pp.
SO
     CODEN: JKXXAF
DT
    Patent
LA
     Japanese
FAN.CNT 1
                                          APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
                                          -----
                     _ _ _ _
                           _____
                                          JP 1979-39233
PΙ
     JP 55130992
                      A2
                           19801011
                                                           19790331
PRAI JP 1979-39233
                           19790331
GI
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$$NH_2$$
 Pt  $R$   $NH_2$  I

Sixteen Pt complexes I (R and R1 = halo or NO3; R and R1 may be SO4, AΒ O2CCO2, O2CCH2CO2) were prepd. and used as neoplasm inhibitors (data given in mice against leukemia P-388). Thus, an aq. mixt. of 1 g trans-d-cyclopentanediammine [77255-03-9] and 3.6 g K2(PtCl4) was kept 12 h at room temp. to produce a ppt. 2 g cis-dichloro(trans-dcyclopentanediammine)Pt(II) [77171-89-2] complex (I; R = R1 = Cl). IR charts of I are presented. IT 77130-42-8P 77130-43-9P 77130-44-0P 77152-59-1P 77171-89-2P 77171-90-5P 77171-91-6P 77398-23-3P 77398-24-4P 77398-64-2P 77398-65-3P 77398-66-4P 77398-67-5P 77398-68-6P 77447-80-4P 77447-81-5P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and antitumor activity of) RN77130-42-8 CAPLUS Platinum, dibromo(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(1S-trans)]-CN (9CI) (CA INDEX NAME)

RN 77130-44-0 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')bis(nitrato-0)-, [SP-4-2-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77152-59-1 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') (D-glucuronato-O6) (nitrato-O)-, [SP-4-3-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77171-89-2 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77171-90-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [sulfato(2-)-O,O']-, [SP-4-2-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77171-91-6 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [ethanedioato(2-)-O,O']-, [SP-4-2-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77398-23-3 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 77398-24-4 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[sulfato(2-)-O,O']-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 77398-64-2 CAPLUS

CN Platinum, dibromo(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 77398-65-3 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')diiodo-, [SP-4-2-(1R-trans)]-

(9CI) (CA INDEX NAME)

RN 77398-66-4 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [propanedioato(2-)-0,0']-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 77398-67-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')bis(nitrato-0)-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 77398-68-6 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [ethanedioato(2-)-O,O']-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 77447-80-4 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[propanedioato(2-)-0,0']-, [SP-4-2-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 77447-81-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') (D-glucuronato-06) (nitrato-0)-, [SP-4-3-(1R-trans)]- (9CI) (CA INDEX NAME)

L13 ANSWER 33 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1981:150179 CAPLUS

DN 94:150179

TI 1,2-diaminocyclohexane platinum derivatives of potential clinical value

AU Burchenal, J. H.; Irani, G.; Kern, K.; Lokys, L.; Turkevich, J.

CS Med. Sch., Cornell Univ., New York, NY, 10021, USA

SO Recent Results in Cancer Research (1980), 74 (Cancer Chemo-

Immunopharmacol., vl), 146-55

CODEN: RRCRBU; ISSN: 0080-0015

DT Journal

LA English

GI

Compds. contg. a 1,2-diamino satd. cyclic moiety such as cyclohexane or cycloheptane are active against lines of leukemia L1210 and P388 sensitive to and resistant to dichlorodiaminoplatinum [15663-27-1] when tested in mice, whereas unsatd. amines, bis-substituted amines, and ethylenediamine derivs. are inactive. Lines resistant to dichloro-1,2-diaminocyclohexane platinum (I) [52691-24-4] still retain sensitivity to high doses of dichlorodiaminoplatinum. Substitutions on the anionic side may alter soly., but have so far had no effect on the cross-resistance of the compds. The problem of soly. of the 1,2-diaminocyclohexane platinum derivs. is particularly acute with the dichloro and malonato deriv. [52351-07-2]. The carboxyphthalato deriv. [65296-81-3], however, is stable in the dry form and is sol. in 1% aq. NaHCO3. Solubilization of both the dichloro and malonato compds. was affected using 2 parts N-methylglucamine [6284-40-8] to 1 part of the compd. and the mixt.

dissolved in distd. water. With the malonato deriv., there is a 5-10 fold increase in activity both in toxicity and therapeutic effectiveness when N-methylglucamine was used.

IT 62863-66-5 62863-67-6 62863-70-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antitumor activity of)

RN 62863-66-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [sulfato(2-)-0,0']-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 62863-67-6 CAPLUS

CN. Platinum, (1,2-cyclopentanediamine-N,N')[propanedioato(2-)-0,0']-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 62863-70-1 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

- L13 ANSWER 34 OF 38 CAPLUS COPYRIGHT 2003 ACS
- AN 1981:96938 CAPLUS
- DN 94:96938
- TI Antifungal activity of selected platinum compounds
- AU Newman, Andrew D.; Whiteman, Patti A.
- CS Dep. Chem. Microbiol., Wadley Inst. Mol. Med., Dallas, TX, USA
- SO Journal of Clinical Hematology and Oncology (1980), 10(2-3), 49-54 CODEN: JCHODP; ISSN: 0162-9360
- DT Journal

LA English

AB 5-Fluorouracil platinum blue, cis-dichloro-trans-dihydroxy-trans-1,2-diaminocyclooctane platinum (IV) [62816-85-7], and cis-dichloro-trans-dinitrato-trans-1,2-diaminocyclopentane platinum (IV) [62816-81-3] exhibited slight antifungal activities against test strains of Candida, Torulopsis, and Cryptococcus, but 35 other Pt compds. did not inhibit fungal growth. Amphotericin B [1397-89-3], a pos. control, was much more inhibitory than any of the Pt compds. Although this class of compds. has been shown to have antibacterial and antitumor effects, there seems to be little potential as antifungal agents.

IT 62816-80-2 62816-81-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (fungicidal activity of)

RN 62816-80-2 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')dihydroxy-,
[OC-6-33-(trans)]- (9CI) (CA INDEX NAME)

RN 62816-81-3 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')bis(nitrato-O)-,
[OC-6-33-(trans)]- (9CI) (CA INDEX NAME)

L13 ANSWER 35 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1980:34121 CAPLUS

DN 92:34121

TI Rationale for development of platinum analogs

AU Burchenal, Joseph H.; Kalaher, Kathleen; Dew, Kimberly; Lokys, Linda

CS Mem. Sloan-Kettering Cancer Cent., New York, NY, 10021, USA

SO Cancer Treatment Reports (1979), 63(9-10), 1493-8

CODEN: CTRRDO; ISSN: 0361-5960

DT Journal

LA English

The 1,2-diamino-satd. cyclic platinum derivs.. showed both a high degree of activity against transplanted mouse leukemias and a lack of cross-resistance to cis-dichlorodiammine platinum(II) (cis-Pt) [15663-27-1]. cis-Pt and these cyclic compds. combined synergistically with derivs. of cytosine arabinoside, VP-16-213 [33419-42-0], and Adriamycin [23214-92-8]. These 1,2-diaminocyclic compds. appeared to have less renal toxicity than cis-Pt. The toxic and therapeutic effects of both cis-Pt and the diamino cyclic compds. was blocked by massive doses of thiourea [59-05-2].

IT 62863-67-6 62863-70-1 72415-80-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(neoplasm inhibiting activity of, dichlorodiammineplatinum in relation to)

RN 62863-67-6 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[propanedioato(2-)-O,O']-,
[SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 62863-70-1 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 72415-80-6 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[sulfito(2-)-O,O']-, (SP-4-2)- (9CI) (CA INDEX NAME)

- L13 ANSWER 36 OF 38 CAPLUS COPYRIGHT 2003 ACS
- AN 1979:432655 CAPLUS
- DN 91:32655
- TI Antineoplastic activity of platinum complexes of trans(dl)-1,2-cyclopentanediamine
- AU Kidani, Yoshinori; Inagaki, Kenji; Yashiro, Tamotsu; Tashiro, Tazuko; Tsukagoshi, Shigeru
- CS Fac. Pharm. Sci., Nagoya City Univ., Nagoya, 467, Japan
- SO Chemical & Pharmaceutical Bulletin (1979), 27(3), 829-30 CODEN: CPBTAL; ISSN: 0009-2363
- DT Journal
- LA English

GI

AB Among several platinum cyclopentanediamine complexes tested against leukemia P-388 in mice sulfato trans-(dl)-1,2-cyclopentanediamineplatinum (I) [62863-66-5] had very good water soly. and showed the highest activity. The cyclopentanediamine compds. had a higher therapeutic index than the cyclohexane analogs.

IT 62863-66-5 62863-67-6 62863-70-1 70692-35-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(neoplasm inhibitor)

RN 62863-66-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N')[sulfato(2-)-O,O']-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 62863-67-6 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [propanedioato(2-)-0,0']-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 62863-70-1 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 70692-35-2 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [ethanedioato(2-)-O,O']-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

L13 ANSWER 37 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1979:413616 CAPLUS

DN 91:13616

TI Studies of cross-resistance, synergistic combinations and blocking of activity of platinum derivatives

AU Burchenal, Joseph H.; Kalaher, Kathleen; Dew, Kimberly; Lokys, Linda; Gale, Glen

CS Mem. Sloan-Kettering Cancer Cent., New York, NY, USA

SO Biochimie (1978), 60(9), 961-5 CODEN: BICMBE; ISSN: 0300-9084

DT Journal

LA English

GI

$$\begin{array}{c|c} & H_2 & C1 \\ & N & C1 \\ & N & C1 \end{array}$$

AB Certain 1,2-diamino satd. cyclic platinum derivs., such as dichloro-1,2-diaminocyclohexane platinum (I) [52691-24-4], had a high degree of activity against transplanted mouse leukemias and showed no cross-resistance to dichloro-diamino platinum (DDP) [15663-27-1]. DDP and these cyclic compds. combined synergistically with the derivs. of ara-C, VP16 [4375-07-9], and adriamycin [23214-92-8]. The toxic effects of both DDP and the diamino cyclic compds. could be blocked by certain thio contg. compds. such as thiourea [62-56-6] and methionine [63-68-3]. Preliminary data suggested that thio rescue may improve the therapeutic index of the platinum derivs.

IT 62863-70-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antileukemic activity of, cross-resistance and synergistic combinations in relation to)

RN 62863-70-1 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

L13 ANSWER 38 OF 38 CAPLUS COPYRIGHT 2003 ACS

AN 1977:415694 CAPLUS

DN 87:15694

TI Analogs of sulfato 1,2-diaminocyclohexane platinum(II) (SHP). II. Modifications other than the leaving ligand

AU Hall, Larry M.; Speer, Robert J.; Ridgway, Helen J.; Stewart, David P.; Newman, Andrew D.; Hill, Joseph M.

CS Wadley Inst. Mol. Med., Dallas, TX, USA

Ι

SO Journal of Clinical Hematology and Oncology (1977), 7(1), 231-41 CODEN: JCHODP; ISSN: 0162-9360

DT Journal

LA English

GΙ

AB The antitumor activities against mouse leukemia 1210 of .apprx.60 analogs of sulfato-1,2-diaminocyclohexaneplatinum(II) (I) [62011-40-9] are tabulated relative to that of I. These analogs include variants in the size of the cycloalkane ring (nonleaving ligand) and in the anion moiety, as well as related Pt(IV) compds. and I analogs contg. transition metals other than Pt. In general, the modifications produced compds. with lower antitumor activity than I, but there were exceptions. The bis (monobromoacetate) analogs of Pt(II) compds. having 5-8 C atoms in the cycloalkane ring were 2-4-fold more active than I. No clear-cut guidelines were found which could aid in predicting structural requirements for antitumor activity. The most promising results were obtained by increasing the cycloalkane ring size to 7 or 8 C atpms. Pt(IV) compds. were generally less active than the corresponding Pt(II) series, and the analogs contg. other transition metals were all inactive. The syntheses of these classes of compds. are given schematically. IT

IT 62816-80-2 62816-81-3 62863-66-5 62863-67-6 62863-68-7 62863-70-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)

(neoplasm inhibiting activity of, structure in relation to)

RN 62816-80-2 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')dihydroxy-, [OC-6-33-(trans)]- (9CI) (CA INDEX NAME)

RN 62816-81-3 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')bis(nitrato-0)-, [OC-6-33-(trans)]- (9CI) (CA INDEX NAME)

RN 62863-66-5 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [sulfato(2-)-0,0']-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 62863-67-6 CAPLUS

CN Platinum, (1,2-cyclopentanediamine-N,N') [propanedioato(2-)-O,O']-, [SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

RN 62863-68-7 CAPLUS
CN Platinum, bis(bromoacetato-0)(1,2-cyclopentanediamine-N,N')-,
[SP-4-2-(trans)]- (9CI) (CA INDEX NAME)

=> s 113 and DNA 613721 DNA L21 3 L13 AND DNA

=> d 121 bib abs 1-3

L21 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS

AN 2000:836230 CAPLUS

DN 134:125167

TI Effect of Ring Size on Coordination Properties of trans-1,2-Cycloalkanediamine Ligands: Synthesis of Dinuclear Platinum(II) Complexes as Potential DNA Cross-Linkers

AU Ongeri, Sandrine; Aitken, David J.; Husson, Henri-Philippe; Kozelka, Jiri; Viossat, Bernard

CS Laboratoire de Chimie Therapeutique, Universite Rene Descartes (Paris V), Paris, 75270, Fr.

SO Inorganic Chemistry (2000), 39(26), 6131-6133 CODEN: INOCAJ; ISSN: 0020-1669

PB American Chemical Society

DT Journal

LA English

OS CASREACT 134:125167

AB Trans-,2-cyclopropanediamine (L) and trans-1,2-cyclobutanediamine (L1) reacted with K[PtCl3(DMSO)] to give trans-[{PtCl2(DMSO)}2(.mu.-L)] and trans-[{PtCl2(DMSO)}2(.mu.-L1)], resp. However, trans-1,2-cyclohexanediamine (L2) and 1,2-cyclopentanediamine (L3) yielded mixed complex salts [PtClL2(DMSO)][PtCl3(DMSO)] (I) and [PtClL3(DMSO)][PtCl3(DMSO)], resp. The crystal structure of I was detd.: monoclinic, space group P21/n, Z = 4, R = 0.0382.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L21 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
AΝ
     1997:119101 CAPLUS
DN
     126:126892
     Drug mitochondrial-targeting agents
ΤI
     Steliou, Kosta
IN
PΑ
     Trustees of Boston University, USA
     PCT Int. Appl., 79 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
                     KIND DATE
                                          APPLICATION NO. DATE
     PATENT NO.
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                                            _____
     WO 9639193 AZ
                            19961212
                                           WO 1996-US10293 19960606
PΙ
                            19970605
         W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
             ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN
                                       US 1995-468844 19950606
                       В1
                            20011113
     AU 9663853
                       A1
                             19961224
                                           AU 1996-63853
                                                              19960606
                                            EP 1996-923305
     EP 831918
                            19980401
                                                              19960606
                       A2
         R: CH, DE, FR, GB, LI, SE
                           19950606
PRAI US 1995-468844
                      Α
     WO 1996-US10293
                            19960606
     MARPAT 126:126892
OS
     The invention relates to novel targeting drug agents that are targeted for
AΒ
     entry into the mitochondria. More specifically, the agents are cisplatin
     derivs. called mitoplatins which are useful as anti-tumor agents.
     Mitoplatins are named for their targeting to the mitochondrial DNA
     via the carnitine-acylcarnitine translocase system. The invention also
     relates to methods of synthesizing mitoplatins, compns. of matter contg.
     mitoplatins and methods of using the mitoplatins. Compds. of the
     invention, in addn. to being useful for the treatment of neoplasms, may
     also be used to treat arthritic disorders.
L21 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
     1992:247969 CAPLUS
AN
DN
     116:247969
ΤI
     Characterization of acquired resistance to cis-
     diamminedichloroplatinum(II) in mouse leukemia cell lines
     Tashiro, Tazuko; Sato, Yuko
ΑU
CS
     Cancer Chemotherapy Cent., Jap. Found. Cancer Res., Tokyo, 170, Japan
SO
     Japanese Journal of Cancer Research (1992), 83(2), 219-25
     CODEN: JJCREP; ISSN: 0910-5050
DT
     Journal
     English
LA
AB
     The authors established in vivo cisplatin-resistant mouse leukemia cell
     lines, L-1210/DDP and P388/DPP, in order to elucidate the mechanism of
     acquired resistance to cisplatin. Resistance indexes were 22 and 14,
     resp., when the cells were exposed to cisplatin for 48 h. Uptake of
     cisplatin by both resistance lines was significantly reduced, compared to
     values for the resp. parent lines (17% for L-1210/DDP and 27% for
     P338/DDP, at 100 .mu.M for 1 h). While glutathione contents in the
     resistant cells were 1.7-1.9 times higher than those in the sensitive
     ones, their redn. by preincubation with buthionine sulfoximine did not
     influence the sensitivity of the cells to cisplatin. In addn., the
     resistant lines did not show lower sensitivity to CdCl2 than the resp.
     sensitive ones, suggesting that intracellular SH groups might contribute
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little to the mechanism of cisplatin resistance in these cells.

Postincubation with DNA repair inhibitors, caffeine and aphidicolin, did not selectively enhance the sensitivity of the resistant cells to cisplatin. These results suggested that reduced drug uptake would be a primary mechanism of cisplatin resistance in L-1210/DDP and P388/DDP. Cross-resistance patterns to platinum complexes were quite different between L-1210/DDP and P388/DDP. Colon DDP, another cisplatin-resistant mouse tumor showed a different pattern from those obsd. with L-1210/DDP and P388/DDP. In the development of new platinum complexes the authors should use plural resistant lines for examg. cross-resistance patterns to candidate platinum complexes.

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=> d 121 bib abs hitstr 1-3
     ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
L21
     2000:836230 CAPLUS
AN
DN
     134:125167
     Effect of Ring Size on Coordination Properties of trans-1,2-
TI
     Cycloalkanediamine Ligands: Synthesis of Dinuclear Platinum(II) Complexes
     as Potential DNA Cross-Linkers
ΑU
     Ongeri, Sandrine; Aitken, David J.; Husson, Henri-Philippe; Kozelka, Jiri;
     Viossat, Bernard
     Laboratoire de Chimie Therapeutique, Universite Rene Descartes (Paris V),
CS
     Paris, 75270, Fr.
     Inorganic Chemistry (2000), 39(26), 6131-6133
SO
     CODEN: INOCAJ; ISSN: 0020-1669
PB
     American Chemical Society
DT
     Journal
     English
LA
os
     CASREACT 134:125167
AΒ
     Trans-,2-cyclopropanediamine (L) and trans-1,2-cyclobutanediamine (L1)
     reacted with K[PtCl3(DMSO)] to give trans-[{PtCl2(DMSO)}2(.mu.-L)] and
     trans-[{PtCl2(DMSO)}2(.mu.-L1)], resp. However, trans-1,2-
     cyclohexanediamine (L2) and 1,2-cyclopentanediamine (L3) yielded mixed
     complex salts [PtClL2(DMSO)][PtCl3(DMSO)] (I) and
     [PtClL3(DMSO)][PtCl3(DMSO)], resp. The crystal structure of I was detd.:
     monoclinic, space group P21/n, Z = 4, R = 0.0382.
IT
     321134-72-9P 321134-73-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
     321134-72-9 CAPLUS
CN
     Platinum(1+), chloro[rel-(1R,2R)-1,2-cyclopentanediamine-
     .kappa.N,.kappa.N'][(sulfinyl-.kappa.S)bis[methane]]-, (SP-4-3)-,
     (SP-4-2)-trichloro[(sulfinyl-.kappa.S)bis[methane]]platinate(1-) (9CI)
     (CA INDEX NAME)
     CM
          1
     CRN 321134-71-8
     CMF
         C7 H18 Cl N2 O Pt S
     CCI CCS
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09567863
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CM

CRN 31203-96-0

CMF C2 H6 Cl3 O Pt S

CCI CCS

321134-73-0 CAPLUS RN

Platinum(1+), chloro[rel-(1R,2R)-1,2-cyclopentanediamine-CN.kappa.N, .kappa.N'][(sulfinyl-.kappa.S)bis[methane]]-, chloride, (SP-4-3)-(9CI) (CA INDEX NAME)

● c1 -

#### THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 13 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS

1997:119101 CAPLUS AN

DN 126:126892

TI Drug mitochondrial-targeting agents

IN Steliou, Kosta

Trustees of Boston University, USA PΑ

so PCT Int. Appl., 79 pp.

CODEN: PIXXD2

DTPatent

English LA

FAN.	CNT	1																
	PATENT NO.				KI	ND	DATE			A.	PPLI	CATI	ON NO	o. 1	DATE			
ΡI	WO	9639	193		A.	2	1996	1212		W	0 19:	96-U	S102	93	1996	0606		
	WO 9639193			A3 19970605														
		W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,
			ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LK,	LR,	LS,
			LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,
			SE,	SG														
		RW:	KE,	LS,	MW,	SD,	SZ,	ŪĠ,	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,
			ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN	
	US 6316652		B1 20011113		US 1995-468844			4	19950606									
	ΑU	9663	853		A	1	1996	1224		A	J 19	96-6	3853		1996	0606		
	EΡ	8319	18		A.	2	1998	0401		E.	P 19:	96-9	2330	5	1996	0606		

R: CH, DE, FR, GB, LI, SE

PRAI US 1995-468844 A 19950606 WO 1996-US10293 W 19960606

OS MARPAT 126:126892

AB The invention relates to novel targeting drug agents that are targeted for entry into the mitochondria. More specifically, the agents are cisplatin derivs. called mitoplatins which are useful as anti-tumor agents.

Mitoplatins are named for their targeting to the mitochondrial DNA via the carnitine-acylcarnitine translocase system. The invention also relates to methods of synthesizing mitoplatins, compns. of matter contg. mitoplatins and methods of using the mitoplatins. Compds. of the invention, in addn. to being useful for the treatment of neoplasms, may also be used to treat arthritic disorders.

IT 186253-71-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug mitochondrial-targeting agents, and prepn. thereof)

RN 186253-71-4 CAPLUS

CN Platinum, [3-carboxy-2-[[5-[3,4-di(amino-.kappa.N)tetrahydro-2-thienyl]-1oxopentyl]oxy]-N,N,N-trimethyl-1-propanaminiumato][1,1cyclobutanedi(carboxylato-.kappa.O)(2-)]-, [SP-4-3-[2S[2.alpha.(S\*),3.alpha.,4.alpha.]]]- (9CI) (CA INDEX NAME)

IT 186253-73-6 186258-37-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(drug mitochondrial-targeting agents, and prepn. thereof)

RN 186253-73-6 CAPLUS

CN Platinum, [3-carboxy-2-[[5-[3,4-di(amino-.kappa.N)tetrahydro-2-thienyl]-1-oxopentyl]oxy]-N,N,N-trimethyl-1-propanaminiumato]dichloro-,
[SP-4-3-[2S-[2.alpha.(S\*),3.alpha.,4.alpha.]]]- (9CI) (CA INDEX NAME)

RN 186258-37-7 CAPLUS

CN Platinate(1-), dichloro[3,4-di(amino-.kappa.N)tetrahydro-2-thiophenepentanoic acid 1-oxidato]-, sodium, [SP-4-3-[1S-(1.alpha.,2.beta.,3.beta.,4.beta.)]]- (9CI) (CA INDEX NAME)

O Na+

IT 186253-69-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction; drug mitochondrial-targeting agents, and prepn. thereof)

RN 186253-69-0 CAPLUS

CN Platinum, [3-carboxy-2-[[5-[3,4-di(amino-.kappa.N)tetrahydro-2-thienyl]-1-oxopentyl]oxy]-N,N,N-trimethyl-1-propanaminiumato]diiodo-, [SP-4-3-[2S-[2.alpha.(S\*),3.alpha.,4.alpha.]]]- (9CI) (CA INDEX NAME)

L21 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS

AN 1992:247969 CAPLUS

DN 116:247969

TI Characterization of acquired resistance to cisdiamminedichloroplatinum(II) in mouse leukemia cell lines

AU Tashiro, Tazuko; Sato, Yuko

CS Cancer Chemotherapy Cent., Jap. Found. Cancer Res., Tokyo, 170, Japan

SO Japanese Journal of Cancer Research (1992), 83(2), 219-25 CODEN: JJCREP; ISSN: 0910-5050

DT Journal

LA English

AB The authors established in vivo cisplatin-resistant mouse leukemia cell lines, L-1210/DDP and P388/DPP, in order to elucidate the mechanism of acquired resistance to cisplatin. Resistance indexes were 22 and 14, resp., when the cells were exposed to cisplatin for 48 h. Uptake of cisplatin by both resistance lines was significantly reduced, compared to values for the resp. parent lines (17% for L-1210/DDP and 27% for P338/DDP, at 100 .mu.M for 1 h). While glutathione contents in the resistant cells were 1.7-1.9 times higher than those in the sensitive ones, their redn. by preincubation with buthionine sulfoximine did not influence the sensitivity of the cells to cisplatin. In addn., the resistant lines did not show lower sensitivity to CdCl2 than the resp. sensitive ones, suggesting that intracellular SH groups might contribute little to the mechanism of cisplatin resistance in these cells. Postincubation with DNA repair inhibitors, caffeine and aphidicolin, did not selectively enhance the sensitivity of the resistant cells to cisplatin. These results suggested that reduced drug uptake

would be a primary mechanism of cisplatin resistance in L-1210/DDP and P388/DDP. Cross-resistance patterns to platinum complexes were quite different between L-1210/DDP and P388/DDP. Colon DDP, another cisplatin-resistant mouse tumor showed a different pattern from those obsd. with L-1210/DDP and P388/DDP. In the development of new platinum complexes the authors should use plural resistant lines for examg. cross-resistance patterns to candidate platinum complexes.

IT 141554-56-5

RL: BIOL (Biological study)

(cisplatin resistant tumor cell lines cross-resistance to)

RN 141554-56-5 CAPLUS

CN Platinum, dichloro(1,2-cyclopentanediamine-N,N')-, (SP-4-2)- (9CI) (CA INDEX NAME)

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=> Uploading 10086515.str

L22 STRUCTURE UPLOADED

=> d 122 L22 HAS NO ANSWERS L22 ST

G1 C,O,S

Structure attributes must be viewed using STN Express query preparation.

=> s 122 full FULL SEARCH INITIATED 15:41:03 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 9227 TO ITERATE

100.0% PROCESSED 9227 ITERATIONS 2 ANSWERS SEARCH TIME: 00.00.01

L23 2 SEA SSS FUL L22

=> file caplus SINCE FILE COST IN U.S. DOLLARS TOTAL ENTRY SESSION FULL ESTIMATED COST 148.95 745.59 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -36.45

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FILE COVERS 1907 - 16 Jun 2003 VOL 138 ISS 25 FILE LAST UPDATED: 15 Jun 2003 (20030615/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 123

L24 2 L23

=> d l24 bib abs hitstr 1-2

L24 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS

AN 1998:172031 CAPLUS

DN 128:238477

TI Synthesis, structure and magnetic properties of transition metal complexes of the nitroxide 2',5'-dihydro-4',5',5'-trimethyl-spiro-[4,5-diazafluorene-9,2'-imidazol]-1-oxyl

AU Hintermaier, Frank; Beck, Wolfgang

CS Institut fur Anorganische Chemie der Universitat, Munchen, D-80333, Germany

SO Polyhedron (1998), 17(4), 483-489 CODEN: PLYHDE; ISSN: 0277-5387

PB Elsevier Science Ltd.

DT Journal

LA English

With the radical 2',5'-dihydro-4',5',5'-trimethyl-spiro-[4,5-diazafluorene-9,2'-imidazol]-1-oxyl (L), transition metal complexes were prepd.:
[ML3](SbF6)2.cntdot.4H2O with M2+ = Mn2+ (1), Fe2+ (2), Co2+ (3), Ni2+ (4), Zn2+ (5). Reaction of L with Cu2+ in methanol yielded different products depending on the counterion. In the presence of weakly coordinating anions the Cu(II) complexes [Cu2L3](SbF6)2.cntdot.H2O (6), [Cu2L3](OTf)2.cntdot.2MeOH (7) and [Cu2L3](Cl04)2 (8) were formed. Stronger coordinating counterions gave the complexes CuL2Cl2.cntdot.H2O (9), CuL2Br2.cntdot.H2O (10) and CuL2(NO3)2 (11). Also the syntheses of [Ag2L3](SbF6)2.cntdot.2H2O (12), Pd(L)Cl2.cntdot.H2O (13), Pt(L)Cl2.cntdot.H2O (14), Ni(L)Cl2 (15a), Ni(L)Cl2.cntdot.4H2O (15b) and [Ru(bipy)2(L)]Cl2.cntdot.4H2O (16) are reported. The magnetic moments of 1-6 and 10 correspond in the range 200-300 K to those expected for noninteracting spins of the metal ion and the radicals. At low temps. spin pairing of metal and radical spins is obsd. for 1-3.

IT 204399-74-6P

RN 204399-74-6 CAPLUS

CN Platinum, dichloro(4',5',5'-trimethylspiro[5H-cyclopenta[2,1-b:3,4-b']dipyridine-5,2'-[2H]imidazol]-1'(5'H)-yloxy-.kappa.N1,.kappa.N9)-, (SP-4-2)- (9CI) (CA INDEX NAME)

Me N 
$$pt2+$$
 C1 - C1 - C1 -

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS

AN 1996:331009 CAPLUS

DN 125:168281

TI Synthesis and molecular structures of palladium and platinum complexes of PTFA: models of Grignard cross-coupling catalysts

AU Jedlicka, Brigitte; Ruelke, Richard E.; Weissensteiner, Walter;

Fernandez-Galan, Rafael; Jalon, Felix A.; Manzano, Blanca R.; Rodriguez-de la Fuente, Jeronimo; Veldman, Nora; Kooijman, Huub; et al.

CS Institut fuer Organische Chemie der Universitaet Wien, Waehringerstrasse 38, Vienna, A-1090, Austria

SO Journal of Organometallic Chemistry (1996), 516(1-2), 97-110 CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier

DT Journal

LA English

OS CASREACT 125:168281

Ι

GΙ

AB A no. of Pd(0) and Pd(II) as well as Pt(0) and Pt(II) complexes of (.eta.5-cyclopentadienyl)-(.eta.5-4-endo-N,N-dimethylamino-3-diphenylphosphino-4,5,6,7-tetrahydro-1H-indenyl)iron (I; PTFA), (PTFA)M(0) (alkene) and (PTFA)M(II) (R)X (M = Pd, Pt; alkene = dibenzylideneacetone, maleic anhydride, fumaronitrile and tetracyanoethylene; R = CH3, Ph and PhCH2; X = Cl, Br and I), were synthesized as models of Grignard cross-coupling catalysts. All complexes were prepd. either by proper ligand exchange or via oxidative addn. reactions. A comparison of the x-ray structures of five complexes [(PTFA)Pd(fumaronitrile), 4, (PTFA)PdCl2, 8, (PTFA)Pd(Ph)I, 10, (PTFA)Pt(tetracyanoethylene), 6, and (PTFA)PtMeCl, 13] showed that, in contrast to complexes of 2-(1-N,N-dimethylaminoethyl)-1-diphenylphosphinoferrocene (PPFA), the overall mol. structures of PTFA complexes are comparable; they neither strongly depend on the oxidn. state of the metal nor on the type of addnl. ligands coordinated to the metal.

IT 180067-01-0

RL: RCT (Reactant); RACT (Reactant or reagent)
 (ligand substitution reaction with (cyclopentadienyl) [amino(diphenylpho
 sphino]tetrahydroindenyl]iron)

RN 180067-01-0 CAPLUS

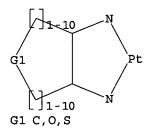
CN Platinum, (5H-cyclopenta[2,1-b:3,4-b']dipyridin-5-one-N1,N9)[(1,2-.eta.)-ethenetetracarbonitrile]- (9CI) (CA INDEX NAME)

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L25 STRUCTURE UPLOADED

=> d 125 L25 HAS NO ANSWERS L25 STR



Structure attributes must be viewed using STN Express query preparation.

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100.0% PROCESSED 12671 ITERATIONS 4288 ANSWERS

SEARCH TIME: 00.00.02

L26 4288 SEA SSS FUL L25

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 148.15 904.06 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -37.75

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FILE COVERS 1907 - 16 Jun 2003 VOL 138 ISS 25 FILE LAST UPDATED: 15 Jun 2003 (20030615/ED)

This file contains CAS Registry Numbers for easy and accurate

substance identification.

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L27
          1837 L26
=> s 127 and (marker? or label? or reporter?)
        148910 MARKER?
        386606 LABEL?
         33440 REPORTER?
L28
            41 L27 AND (MARKER? OR LABEL? OR REPORTER?)
=> s 128 and nucleic acid
        142357 NUCLEIC
       3655138 ACID
        100018 NUCLEIC ACID
                 (NUCLEIC (W) ACID)
L29
             2 L28 AND NUCLEIC ACID
=> d l29 bib abs hitstr
     ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS
     2002:695720 CAPLUS
\mathbf{A}\mathbf{N}
DN
     137:211908
ΤI
     Platinum compounds for nucleic acid labeling
IN
     Braman, Jeffrey Carl; Huang, Haogiang
PΑ
     Stratagene, USA
SO
     PCT Int. Appl., 88 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
     WO 2002069898
PТ
                      A2
                            20020912
                                           WO 2002-US6410
                                                            20020301
         W: CA
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, TR
     US 2002165369
                     A1
                            20021107
                                           US 2002-86515
                                                             20020301
PRAI US 2001-272921P
                            20010302
                      P
os
     MARPAT 137:211908
AΒ
     The invention relates to novel platinum-based compds. for labeling
     biomols. Platinum based labeling compds. according to the
     invention irreversibly attach to a target biomol. via coordination of a
     platinum (II) metal center with N or S atoms on the target biomol. The
     invention relates to the novel compds. themselves, methods of making the
     platinum-based labeling compds., probes labeled with
     such compds., methods of making such labeled probes, and kits
     comprising the novel platinum-based labeling compds. and/or
     probes labeled with them. The invention also relates to methods
     of using probes labeled with platinum-based labeling
     compds. of the invention, particularly array and microarray hybridization
     methods. Thus, platinum (Cy3-cyclohexanediamine) dinitrate was
     synthesized and shown to label a synthetic 73-residue
     oligonucleotide with 90-95% yield by reaction at 80.degree. for 30 min
     using a two-fold excess of platinum labeling compd.
IT
     455921-79-6P 455922-68-6P 455922-69-7P
     RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (platinum compds. for nucleic acid labeling
     455921-79-6 CAPLUS
RN
```

CN Platinum, [9-[4(or 5)-[[[3-[[2-(amino-.kappa.N)cyclohexyl]amino.kappa.N]propyl]amino]carbonyl]-2-carboxyphenyl]-3,6bis(dimethylamino)xanthyliumato]bis(nitrato-.kappa.O)- (9CI) (CA INDEX NAME)

RN 455922-68-6 CAPLUS

CN Platinum, [rel-9-[5-[[6-[[(1R,2R)-2-(amino-.kappa.N)cyclohexyl]amino-.kappa.N]-6-oxohexyl]amino]carbonyl]-2-carboxyphenyl]-3,6bis(dimethylamino)xanthyliumato]bis(nitrato-.kappa.O)-, (SP-4-3)- (9CI)
(CA INDEX NAME)

$$\begin{array}{c} O_2N-O^- & H_2 \\ O_2N-O^- & H_2 \\$$

RN 455922-69-7 CAPLUS

CN Platinate(1-), [2-[5-[1-[6-[[6-[[2-(amino-.kappa.N)cyclohexyl]amino-.kappa.N]hexyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-3H-indoliumato(2-)]bis(nitrato-.kappa.O)-, hydrogen, (SP-4-3)- (9CI) (CA INDEX NAME)

● H+

RN 455921-39-8 CAPLUS
CN Platinum, [9-[4(or 5)-[[[3-[[2-(amino-.kappa.N)cyclohexyl]amino-.kappa.N]propyl]amino]carbonyl]-2-carboxyphenyl]-3,6-bis(dimethylamino)xanthyliumato]dichloro- (9CI) (CA INDEX NAME)

RN 455922-67-5 CAPLUS

CN Platinum, [rel-9-[5-[[[6-[[(1R,2R)-2-(amino-.kappa.N)cyclohexyl]amino-.kappa.N]-6-oxohexyl]amino]carbonyl]-2-carboxyphenyl]-3,6-bis(dimethylamino)xanthyliumato]dichloro-, (SP-4-3)- (9CI) (CA INDEX NAME)

## => d l29 bib abs hitstr 2

L29 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS

AN 2001:508052 CAPLUS

DN 135:87149

TI High-throughput quantification of cellular injury using **reporter** gene under the control of the GADD153 promoter and the screening DNA-damaging cytotoxins

IN Howell, Stephen B.; Lin, Xinjian; Gately, Dennis P.

PA USA

SO U.S. Pat. Appl. Publ., 18 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	CIVI							
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
PI	US 2001007768	A1	20010712	US 2000-479529	20000107			
	US 6344324	B2	20020205					
	WO 2001051607	A1	20010719	WO 2001-US293	20010104			

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-479529 A 20000107

AB The present invention features a novel cellular injury reporter system in which a chimeric gene contg. the GADD153 promoter linked to the coding region of an enhanced green fluorescent protein (EGFP) gene was stably integrated into the genome of carcinoma cells. Activation of the GADD153 promoter was quantified using flow cytometric measurement of EGFP expression following drug exposure. This reporter system is suitable for high throughput in vitro and in vivo screening for agents capable of producing cytotoxicity via a wide variety of different mechanisms, and can be utilized to investigate the relative potency of

GT 61825-94-3, Oxaliplatin 62816-98-2, Tetraplatin
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(anal. of cytotoxic effects of; high-throughput quantification of cellular injury using reporter gene under control of GADD153 promoter and screening DNA-damaging cytotoxins)

RN 61825-94-3 CAPLUS

structurally related DNA adducts.

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN 62816-98-2 CAPLUS

CN Platinum, tetrachloro[rel-(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (OC-6-22)- (9CI) (CA INDEX NAME)

=> s 128 not 129

L30 39 L28 NOT L29

=> d 130 bib abs hitstr 1-39

L30 ANSWER 1 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2003:252599 CAPLUS

DN 138:382921

TI Predictive markers for colorectal cancer: current status and future prospects

AU Longley, Daniel B.; McDermott, Ultan; Johnston, Patrick G.

CS Department of Oncology, Cancer Research Centre, Queen's University Belfast, Ire.

SO Clinical Colorectal Cancer (2003), 2(4), 223-230 CODEN: CCCLCF; ISSN: 1533-0028

PB Cancer Information Group

DT Journal; General Review

LA English

AB Colorectal cancer (CRC) is the second leading cause of cancer death in the United States. Although there is clear evidence of the benefit of chemotherapy in adjuvant and metastatic settings, its use continues to be suboptimal because of intrinsic or acquired drug resistance. 5-Fluorouracil continues to be the mainstay of CRC therapy, and combinations with newer chemotherapeutic agents such as irinotecan and oxaliplatin have resulted in improved response rates and survival. The role of other agents including cyclooxygenase-2 inhibitors, epidermal growth factor receptor, and farnesyl transferase inhibitors remains to be elucidated. Despite these improvements, many patients undergo chemotherapy without benefit. Increased understanding of the biol. of CRC has led to the identification of prognostic markers that may help identify patients who will benefit from chemotherapy. Furthermore, studies have also begun to identify markers that predict whether a tumor will respond to a particular chemotherapy. The ultimate goal of this research is to prospectively identify patients who should receive chemotherapy and, thus, to tailor treatment to the mol. profile of the tumor and patient. Such an approach has the potential to dramatically improve response rates. This review highlights potentially important prognostic and predictive factors in CRC and discusses the potential for their use in the treatment of this disease.

IT **61825-94-3**, Oxaliplatin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(predictive markers for colorectal cancer)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

## RE.CNT 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L30 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2003 ACS
- AN 2003:10911 CAPLUS
- DN 138:283405
- TI Chemoradiation of cervical cancer cells: targeting human papillomavirus E6 and p53 leads to either augmented or attenuated apoptosis depending on the platinum carrier ligand
- AU Koivusalo, Riku; Krausz, Eberhard; Ruotsalainen, Pertti; Helenius, Hans; Hietanen, Sakari
- CS Department of Obstetrics and Gynecology, Turku University Central Hospital, Turku, 20520, Finland
- SO Cancer Research (2002), 62(24), 7364-7371 CODEN: CNREA8; ISSN: 0008-5472
- PB American Association for Cancer Research
- DT Journal
- LA English
- ABRecent clin. trials comparing concurrent chemotherapy and radiation with radiation alone in cervical cancer have shown that chemoradiation reduces the risk of death by 30-50%. Despite the clin. success, treatment responses at the cellular level are still inadequately explored. A key event in cervical carcinogenesis is the disruption of p53 tumor suppressor pathway by human papillomavirus (HPV) E6 oncogene. We found that regardless of the HPV type in SiHa (HPV 16+) CaSki (HPV 16+), HeLa (HPV 18+), and UT-DEC-1 (HPV 33+) cell lines, cisplatin, carboplatin, and a novel platinum compd., oxaliplatin, activated a p53 reporter and reduced the HPV E6 mRNA. Carboplatin and oxaliplatin treatment led also to stabilization of p53, whereas none of the platinums changed p73 levels. After irradn. (IR) alone, a decrease in HPV E6 mRNA levels and an activation of the p53-reporter were detected in SiHa, CaSki, and HeLa cells, but not in UT-DEC-1 cells. Concomitant platinum treatment and IR led to poly(ADP-ribose) polymerase cleavage as a sign of caspase-3 activation and apoptosis. Clonogenic survival was enhanced by expressing a dominant neg. p53 or ectopic HPV16 E6 in SiHa and HeLa cells treated with IR, carboplatin, or oxaliplatin or with a combination of IR + carboplatin or oxaliplatin. In contrast, dominant neg. p53 or ectopic HPV 16 E6 sensitized the cells to cisplatin. Pt chemotherapeutics and radiation had a synergistic cytotoxic effect as detd. by Bliss independence criterion. Taken together, p53 has a significant role in the cellular response to chemoradiation treatment in cervical cancer cell lines, but p53 activity may have a dramatically different effect on cell survival depending on the platinum carrier ligand.
- IT **61825-94-3**, Oxaliplatin
  - RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (chemoradiation of cervical cancer: targeting human papillomavirus E6 and p53 leads to either augmented or attenuated apoptosis depending on platinum carrier ligand)
- RN 61825-94-3 CAPLUS
- CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 3 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2002:944194 CAPLUS

DN 138:21423

TI Apoptosis as an predictive **marker** for response to neoadjuvant radiochemotherapy in patients with rectal cancer

AU Roedel, F.; Roedel, C.; Sauer, R.

CS Department of Radiooncology, University of Erlangen, Erlangen, Germany

Progress in Radio-Oncology VII, Proceedings of the International Meeting on Progress in Radio-Oncology, 7th, Salzburg, Austria, May 15-19, 2002 (2002), 517-523. Editor(s): Kogelnik, H. D.; Lukas, P.; Sedlmayer, F. Publisher: Monduzzi Editore, Bologna, Italy. CODEN: 69DIQO; ISBN: 88-323-2515-2

DT Conference

LA English

AB A preoperative radiochemotherapy (RCT) can markedly improve surgery in locally advanced (T4) rectal cancer. However, tumor response varies considerably even among tumors treated according to the same protocol. On pretreatment biopsies from 44 patients treated uniformly according to a prospective neoadjuvant RCT-protocol the apoptotic index (AI), Ki-67, p53, and bcl-2 were evaluated by immunohistochem. and correlated to histopathol. treatment response and relapse-free survival. Tumors with complete or good response to RCT showed significantly higher pretreatment levels of apoptosis (mean AI: 2.06%) than tumors with moderate, minimal or no regression (AI: 1.44%, p=0.003). The AI was significantly related to Ki-67 (p=0.05), but not to the p53 and bcl-2 status. Tumor regression and AI best predicted relapse-free survival after combined modality treatment and curative surgery.

IT **61825-94-3**, Oxaliplatin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(apoptosis as predictive marker for response to radiochemotherapy in patients with rectal cancer)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 4 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2002:740324 CAPLUS

DN 137:272708

TI Advances in the treatment of metastatic colorectal cancer

AU Fishman, Ari D.; Wadler, Scott

CS Department of Oncology, Montefiore Medical Center, Albert Einstein College of Medicine, Bronx, NY, USA

SO Clinical Colorectal Cancer (2001), 1(1), 20-35 CODEN: CCCLCF; ISSN: 1533-0028

PB Cancer Information Group

DT Journal; General Review

LA English

A review. Colorectal cancer represents the third leading cause of cancer mortality in the United States. During the past four decades, 5-fluorouracil (5-FU) has served as the cornerstone of therapy for individuals with advanced colorectal cancer (ACRC). Despite numerous attempts at maximizing efficacy of 5-FU through biochem. modulation, a significant benefit in terms of survival has never been realized. The recent emergence of novel chemotherapeutic drugs employing different mechanisms of action than 5-FU has led to the incorporation of irinotecan (CPT-11) with 5-FU/leucovorin as the new std. first-line regimen for future trials. This review outlines emerging data utilizing oral fluoropyrimidines and other new agents including oxaliplatin, raltitrexed, and eniluracil. Randomized clin. trials are currently underway in an effort to define optimal combination chemotherapy regimens, scheduling of agents, duration of therapy, and choice of therapy using a variety of prognostic mol. markers.

IT **61825-94-3**, Oxaliplatin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(advances in treatment of metastatic colorectal cancer)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

#### THERE ARE 122 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 122 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 5 OF 39 CAPLUS COPYRIGHT 2003 ACS

2002:716015 CAPLUS AN

137:226593 DN

ΤI Method for treating cancer using A33 specific antibodies and chemotherapeutic agents

Welt, Sydney; Kemeny, Nancy; Ritter, Gerd; Jungbluth, Achim A.; Old, Lloyd IN J.; Cohen, Leonard

Ludwig Institute for Cancer Research, USA; Sloan Kettering Institute for PΑ Cancer Research

PCT Int. Appl., 54 pp. SO

CODEN: PIXXD2

דת Patent

English LA

FAN.CNT 1

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	PATENT NO. 			KI	KIND DATE				APPLICATION NO.					DATE					
PI				8 0	A:	20020919			WO 2002-US6902					20020308					
	WO 2002072008		80	C2 20021128		1128													
		W:	ΑE,	AG,	ΑL,	AM,	AΤ,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DΕ,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
			UA,	ŪĠ,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	ΑT,	BE,	CH,	
			CY,	DΕ,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NΕ,	SN,	TD,	TG	
US 2002187144			A:	1	2002	1212		U	S 20	01-8	0052	2	2001	0308					
DDAT IIC 2001-800522		7		2001	U 3 U B														

PRAI US 2001-800522 20010308

This invention relates to a combination of immunotherapy and chemotherapy to promote tumor regression by treating a patient in need thereof with a combination of an antibody that binds to A33 antigen and one or more chemotherapeutic agents. The method is useful for treating patients with colorectal cancer and gastric carcinomas. The method is particularly useful for treating patients who have tumors that are resistant to one or more chemotherapeutic agents and/or have metastasized.

IT **61825-94-3**, Oxaliplatin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method for treating cancer using A33 specific antibodies and chemotherapeutic agents)

61825-94-3 CAPLUS RN

Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'][ethanedioato CN (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

- L30 ANSWER 6 OF 39 CAPLUS COPYRIGHT 2003 ACS
- AN 2002:536808 CAPLUS
- DN 137:288648
- TI Association between glutathione S-transferase P1, T1, and M1 genetic polymorphism and survival of patients with metastatic colorectal cancer
- AU Stoehlmacher, Jan; Park, David J.; Zhang, Wu; Groshen, Susan; Tsao-Wei, Denice D.; Yu, Mimi C.; Lenz, Heinz-Josef
- CS Department of Medical Oncology, University of Southern California/Norris Comprehensive Cancer Center, Los Angeles, CA, 90033, USA
- SO Journal of the National Cancer Institute (2002), 94(12), 936-942 CODEN: JNCIEQ; ISSN: 0027-8874
- PB Oxford University Press
- DT Journal
- LA English
- Members of the glutathione S-transferase (GST) superfamily are important ABin cellular defense mechanisms. These enzymes attach reduced glutathione to electrophilic groups in a wide variety of toxic compds., including chemotherapeutic agents. Certain polymorphisms in GSTs are assocd. with changes in enzyme activity, sensitivity to chemotherapy, and overall patient survival. In a retrospective study, we investigated assocns. between common polymorphisms in genes for several GST subclasses (GSTP1, GSTT1, GSTM1) and survival of patients with metastatic colorectal cancer receiving 5-fluorouracil (5-FU)/oxaliplatin chemotherapy. During 1998-2000, 107 previously treated patients with advanced colorectal cancer received 5-FU/oxaliplatin combination chemotherapy. Assocns. between deletion polymorphisms in GSTM1 and GSTT1 genes and between a polymorphism in the GSTP1 gene that generates an Ile105Val in the GSTP1 protein and survival were evaluated using relative risks (RRs) of dying and the log-rank test. All statistical tests were two-sided. Patients heterozygous for the GSTP1 polymorphism had an RR = 0.47 (95% confidence interval [CI] = 0.27 to 0.81) compared with patients homozygous for the GSTP1 105Ile allele. Patients homozygous for the mutant polymorphism had an RR = 0.16 (95% CI = 0.04 to 0.63). After adjustment for performance status and tumor site, the stratified RRs were 0.28 (95% CI = 0.07 to 1.10) for patients with two 105Val alleles and 0.64 (95% CI = 0.36 to 1.16) for those with one 105Val allele (P = .042). Patients with the 105Val/105Val genotype survived a median of 24.9 mo, those with the 105Ile/105Ile genotype a median of 7.9 mo, and those with the 105Ile/105Val genotype a median of 13.3 mo (P<.001). The GSTM1 and GSTT1 genotypes were not assocd. with survival or clin. response. The GSTP1 Ile105Val polymorphism is assocd. in a dose-dependent fashion with increased survival of patients with advanced colorectal cancer receiving 5-FU/oxaliplatin chemotherapy.
- IT **61825-94-3**, Oxaliplatin
  - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (glutathione S-transferase P1, T1, and M1 genetic polymorphism and survival of patients with metastatic colorectal cancer receiving 5-fluorouracil/oxaliplatin chemotherapy)
- RN 61825-94-3 CAPLUS
- CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD

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ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 7 OF 39 CAPLUS COPYRIGHT 2003 ACS
L30
AN
     2002:521462 CAPLUS
DN
     137:88442
ΤI
     Incensole and furanogermacrens and compounds in treatment for inhibiting
     neoplastic lesions and microorganisms
IN
     Shanahan-Pendergast, Elisabeth
PA
     Ire.
     PCT Int. Appl., 68 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                               APPLICATION NO.
                                                                DATE
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PΙ
     WO 2002053138
                        A2
                              20020711
                                               WO 2002-IE1
                                                                 20020102
     WO 2002053138
                              20020919
                        A3

    W: AE, AG, AT, AU, BB, BG, CA, CH, CN, CO, CU, CZ, LU, LV, MA, MD, UA, UG, US, VN, YU, RU, TJ, TM
    RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, AT, BE, CH, CY, DE, ES, FI, ML, MR, NE, SN, TD, TG

PRAI IE 2001-2
                              20010102
                         Α
OS
     MARPAT 137:88442
AΒ
     The invention discloses the use of incensole and/or furanogermacrens,
     derivs. metabolites and precursors thereof in the treatment of neoplasia,
     particularly resistant neoplasia and immundysregulatory disorders. These
     compds. can be administered alone or in combination with conventional
     chemotherapeutic, antiviral, antiparasite agents, radiation and/or
     surgery. Incensole and furanogermacren and their mixt. showed antitumor
     activity against various human carcinomas and melanomas and antimicrobial
     activity against Staphylococcus aureus and Enterococcus faecalis.
IT
     61825-94-3, Oxaliplatin 62816-98-2, Ormaplatin
     96392-96-0, Dexormaplatin
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (pharmaceutical formulation further including; incensole and
        furanogermacrens and compds. as antitumor and antimicrobial agents)
RN
     61825-94-3 CAPLUS
CN
     Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato
     (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)
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RN 62816-98-2 CAPLUS

CN Platinum, tetrachloro[rel-(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (OC-6-22)- (9CI) (CA INDEX NAME)

RN 96392-96-0 CAPLUS

CN Platinum, tetrachloro[(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (OC-6-22)- (9CI) (CA INDEX NAME)

L30 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2002:439490 CAPLUS

DN 137:155041

TI Structural and Mechanistic Investigations of the Oxidation of Dimethylplatinum(II) Complexes by Dioxygen

AU Rostovtsev, Vsevolod V.; Henling, Lawrence M.; Labinger, Jay A.; Bercaw, John E.

CS Arnold and Mabel Beckman Laboratories of Chemical Synthesis, California Institute of Technology, Pasadena, CA, 91125, USA

SO Inorganic Chemistry (2002), 41(14), 3608-3619 CODEN: INOCAJ; ISSN: 0020-1669

PB American Chemical Society

DT Journal

LA English

OS CASREACT 137:155041

AB The oxidn. of (tmeda)PtIIMe2 (1, tmeda = N,N,N',N'tetramethylethylenediamine) to (tmeda)PtIV(OH)(OCH3)Me2 (3) by dioxygen in
MeOH proceeds via a two-step mechanism. The initial reaction between
(tmeda)PtMe2 and dioxygen yields a hydroperoxoplatinum(IV) intermediate,

(tmeda)Pt(OOH)(OCH3)Me2 (2), which reacts with a 2nd equiv. of (tmeda)PtMe2 to afford the final product 3. Both 2 and 3 were fully characterized, including x-ray crystallog. structure detns. The effect of ligand variation on the oxidn. of several dimethylplatinum(II) complexes by 2 as well as by dioxygen was examd.

IT 215101-94-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (formation from platinum(II) complex and dioxygen in methanol)

RN 215101-94-3 CAPLUS

CN Platinum, hydroxymethoxydimethyl(1,10-phenanthroline-.kappa.N1,.kappa.N10)-, (OC-6-24)- (9CI) (CA INDEX NAME)

RN 52594-55-5 CAPLUS

CN Platinum, dimethyl(1,10-phenanthroline-.kappa.N1,.kappa.N10)-, (SP-4-2)- (9CI) (CA INDEX NAME)

IT 63133-64-2, (2,9-Dimethyl-4,7-diphenyl-1,10-phenanthroline)dimethylplatinum

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent) (relative rate of oxidn. by dioxygen in acetonitrile/methanol compared to other diimine complexes)

RN 63133-64-2 CAPLUS

CN Platinum, (2,9-dimethyl-4,7-diphenyl-1,10-phenanthroline-.kappa.N1,.kappa.N10)dimethyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 9 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2002:12731 CAPLUS

DN 136:226439

TI Xeroderma pigmentosum group D gene polymorphism predicts clinical outcome to platinum-based chemotherapy in patients with advanced colorectal cancer

AU Park, David J.; Stoehlmacher, Jan; Zhang, Wu; Tsao-Wei, Denice D.; Groshen, Susan; Lenz, Heinz-Josef

CS Department of Medicine, Los Angeles County/University of Southern California Medical Center, Los Angeles, CA, 90033, USA

SO Cancer Research (2001), 61(24), 8654-8658 CODEN: CNREA8; ISSN: 0008-5472

PB American Association for Cancer Research

DT Journal

LA English

AΒ The Xeroderma pigmentosum group D (XPD) protein is an essential participant in nucleotide excision repair and basal transcription. is evidence that three common polymorphisms of the XPD gene (C156A, Asp312Asn, and Lys751Gln) may be assocd. with differential DNA repair activity. Because increased DNA repair plays an important role in chemoresistance to platinum-based compds., we assessed the aforementioned polymorphisms in 73 patients with metastatic colorectal cancer and detd. their outcome to 5-fluorouracil/oxaliplatin. Among those tested for the Lys751Gln polymorphism, 24% (5 of 21) patients with the Lys/Lys genotype responded, vs. 10% (4 of 39) and 10% (1 of 10) of those with the Lys/Gln and Gln/Gln genotypes (P = 0.015). The median survival for those with the Lys/Lys genotype was 17.4 (95% CI 7.9, 26.5) vs. 12.8 (95% CI 8.5, 25.9) and 3.3 (95% CI 1.4, 6.5) months for patients with the Lys/Gln and Gln/Gln resp. (P = 0.002). The polymorphisms CI56A and Asp312Asn of the XPD gene were not assocd. with response to 5-fluorouracil/oxaliplatin nor with survival. However, a linkage was obsd. between the Lys751 allele and the CI56 allele (P = 0.028), and between the Lys751Lys genotype and the Asp312Asp genotype (P < 0.001). We conclude that XPD Lys751Gln polymorphism may be an important marker in the prediction of clin. outcome to platinum-based chemotherapy.

IT **61825-94-3**, Oxaliplatin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(xeroderma pigmentosum group D gene polymorphism predicts clin. outcome to platinum-based chemotherapy in patients with advanced colorectal cancer)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2001:935067 CAPLUS

DN 136:193835

TI ERCC1 and thymidylate synthase mRNA levels predict survival for colorectal cancer patients receiving combination oxaliplatin and fluorouracil chemotherapy

AU Shirota, Yoshinori; Stoehlmacher, Jan; Brabender, Jan; Xiong, Yi-Ping; Uetake, Hiroyuki; Danenberg, Kathleen D.; Groshen, Susan; Tsao-Wei, Denise D.; Danenberg, Peter V.; Lenz, Heinz-Josef

CS University of Southern California/Norris Comprehensive Cancer Center and, Los Angeles, CA, 90033, USA

SO Journal of Clinical Oncology (2001), 19(23), 4298-4304 CODEN: JCONDN; ISSN: 0732-183X

PB Lippincott Williams & Wilkins

DT Journal

LA English

AB Purpose: To test the hypotheses of whether the relative mRNA expression of the thymidylate synthase (TS) gene and the excision cross-complementing (ERCC1) gene are assocd. with response to and survival of fluorouracil (5-FU)/oxaliplatin chemotherapy in metastatic colorectal cancer. Patients and Methods: Patients had progressive stage IV disease after unsuccessful 5-FU and irinotecan chemotherapy. All patients were evaluated for eligibility for a compassionate 5-FU/oxaliplatin protocol. CDNA was derived from paraffin-embedded tumor specimens to det. TS and ERCC1 mRNA expression relative to the internal ref. gene beta-actin using fluorescence-based, real-time reverse transcriptase polymerase chain reaction. Results: The median TS gene expression level from 50 metastasized tumors was 3.4 .times. 10-3 (min. expression, 0.18 .times. 10-3; max. expression, 11.5 .times. 10-3), and the median ERCC1 gene expression level was 2.53 .times. 10-3 (min., 0.0; max., 14.61 .times. 10-3). The gene expression cutoff values for chemotherapy nonresponse were 7.5 .times. 10-3 for TS and 4.9 .times. 10-3 for ERCC1. The median survival time for patients with TS .ltoreq. 7.5 .times. 10-3 (43 of 50 patients) was 10.2 mo, compared with 1.5 mo for patients with TS greater than 7.5 .times. 10-3 (P < .001). Patients with ERCC1 expression .ltoreq. 4.9 .times. 10-3 (40 of 50 patients) had a median survival time of 10.2 mo, compared with 1.9 mo for patients with ERCC1 expression greater than 4.9 .times. 10-3 (P < .001). A TS of 7.5 .times. 10-3 segregated significantly into response, stable disease, and progression (P = .02), whereas the assocn. between ERCC1 and response did not reach statistical significance (P = .29). Conclusion: These data suggest that intratumoral ERCC1 mRNA and TS mRNA expression levels are independent predictive markers of survival for 5-FU and oxaliplatin combination chemotherapy in 5-FU-resistant metastatic colorectal cancer. Precise definition of the best TS cut point will require further anal. in a large, prospective study.

IT **61825-94-3**, Oxaliplatin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ERCC1 and thymidylate synthase mRNA levels predict survival for colorectal cancer patients receiving combination oxaliplatin and fluorouracil chemotherapy)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2001:755008 CAPLUS

DN 136:95689

TI Thymidylate synthase as a molecular target for drug discovery using the National Cancer Institute's Anticancer Drug Screen

AU Parr, Allyson L.; Myers, Timothy G.; Holbeck, Susan L.; Loh, Yenlin J.; Allegra, Carmen J.

CS Medicine Branch, Developmental Therapeutics Program, National Cancer Institute, National Institutes of Health, Bethesda, MD, 20889, USA

SO Anti-Cancer Drugs (2001), 12(7), 569-574 CODEN: ANTDEV; ISSN: 0959-4973

PB Lippincott Williams & Wilkins

DT Journal

LA English

AB

Thymidylate synthase (TS) is a crit. cellular target for cancer chemotherapeutics, particularly the fluoropyrimidine and antifolate classes of antineoplastic agents. One of the primary mechanisms of clin. insensitivity to these agents is through the overexpression of the target enzyme, TS. Thus, there is a need for the development of agents which selectively target TS-overexpressing malignant cells. To this end, we conducted a search for agents which potentially selectively target TS-overexpressing cells using two sep. algorithms for identifying such compds. in the NCI Drug Repository by comparing cytotoxicity profiles of 30 000 compds. with the TS expression levels measured by Western blot anal. in 53 cell lines. Using the traditional COMPARE anal. we were unable to identify compds. which maintain a selective ability to kill high TS-expressing cells in a subsequent four cell line validation assay. A new algorithm, termed COMPARE Effect Clusters anal., enabled the identification of a particular drug cluster which contained compds. that maintained a selective ability to kill TS-overexpressing cell lines in the validation assay. While the identified compds. were selectively cytotoxic to TS-overexpressing cells, we found that they were not specifically targeting TS as a mechanism of action. Apparently, the overexpression of TS was providing a marker for sensitivity. This identified class of compds. which appears to be selectively cytotoxic against cells which overexpress TS may be useful for the development of therapeutics for those whose cancers overexpress TS de novo.

IT 61848-70-2, NSC 255917

RL: PAC (Pharmacological activity); BIOL (Biological study) (thymidylate synthase as a mol. target for drug discovery using the National Cancer Institute's Anticancer Drug Screen)

RN 61848-70-2 CAPLUS

CN Platinum, dichloro[rel-(1R,2S)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'], (SP-4-3)- (9CI) (CA INDEX NAME)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 12 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2001:341701 CAPLUS

DN 135:220843

TI Irinotecan (Campto R): efficacy as third/forth line therapy in advanced pancreatic cancer

AU Klapdor, R.; Fenner, C.

CS Internal Medicine, Jerusalem Krankenhaus and Center for Clinical and Experimental Tumormarker Diagnosis and Therapy GmbH, Hamburg, 20357, Germany

SO Anticancer Research (2000), 20(6D), 5209-5212 CODEN: ANTRD4; ISSN: 0250-7005

PB International Institute of Anticancer Research

DT Journal

LA English

Following the concept that the actual survival of pancreatic cancer AB patients can only be significantly improved by sequential poly-chemotherapy (EOSPC) in order to add one or two further progression free-survival times (PFST), in addn. to the potential antitumoral effects of a first- or second-line therapy we studied the therapeutic efficacy of a third- or fourth-line chemotherapy with irinotecan alone, or in combination with oxaliplatin and high dose 5-FU/FA resp., in a pilot study in 17 patients. Follow-up was performed on the basis of clin. investigations, imaging methods and the course of tumor markers, mainly CT and CA 19-9. The overall response rate in these cases of third/fourth- line therapies was 1PR, 4 MR, 6 SD in the imaging methods compared to 5 PR, 2 MR and 5 SD on the basis of the tumor marker courses in the serum. The median PFST amounted to 4 mo. Side effects could be seen as reported in the literature. Only in 1 patient did treatment have to be stopped due to irinotecan-induced gastrointestinal symptoms. Our data might suggest that combinations are more effective than irinotecan alone. However, further studies have to demonstrate whether irinotecan alone or in combination with e.g. oxaliplatin and 5-FU/FA will be more effective. The results suggested that irinotecan alone or in combination might also be used as third- and fourth-line therapeutical trials in exocrine pancreatic cancer in order to improve the survival time of these patients based on efficacy orientated sequential poly-chemotherapy (EOSPC).

IT **61825-94-3**, Oxaliplatin

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(irinotecan (Campto R) therapeutic efficacy as third/forth line therapy in combination with oxaliplatin and 5-fluorouracil in advanced pancreatic cancer in humans)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 13 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2001:341700 CAPLUS

DN 135:220842

TI Improvement of survival by efficacy orientated sequential poly-chemotherapy of exocrine pancreatic cancer

AU Klapdor, R.; Muller, Chr.; Seutter, R.; Bahlo, M.; Peters, W.; Fenner, C.

CS Internal Medicine, Institute of Radiology, Jerusalem Krankenhaus, Hamburg, D-20095, Germany

SO Anticancer Research (2000), 20(6D), 5201-5207 CODEN: ANTRD4; ISSN: 0250-7005

PB International Institute of Anticancer Research

DT Journal

LA English

Results of palliative chemotherapy in 104 patients suffering from exocrine AB pancreatic carcinomas are presented. First-line therapy included intraarterial approaches with gemcitabine + mitomycin-C and i.v. systemic treatments with gemcitabine, gemcitabine + mitomycin-C and oxaliplatin, In addn., it was the aim to improve survival by adding second- and third-line chemotherapies, mainly including high dose 5-FU/FA and irinotecan resp. alone or in combinations. Follow-up included clin. investigations, imaging methods and detn. of tumor markers. Evaluation of efficacy followed the WHO guidelines. The results indicated the intraarterial locoregional treatment of exocrine pancreatic cancer with a combination of mitomycin-C + gemcitabine as a highly effective treatment modality with PR + CR of 40% measured by imaging methods and 81% analyzed by tumor marker detns. The survival analyses suggested relevant prolongation of survival in relation to the no. of effective second- and/or third-line therapies (0/1 / >1) with median survival based on the imaging data - of 7, 11 and 20 mo for Mo tumors and 3,8 and 14 mo for tumor diseases with liver metastases at time of admission, resp. Relevant preconditions for second- and/or third-line therapies of pancreatic carcinomas are given by more or less effective first-line treatment modalities of this cancer disease on the one hand and by the actual diagnostic aids allowing the beginning of first-line therapy as well as the detection of recurrence early enough to try a second- or third-line therapy before clin./ethical aspects prevent further antitumoral treatment trials in the individual patient.

IT **61825-94-3**, Oxaliplatin

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or

effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (poly-chemotherapy in treatment of exocrine pancreatic cancer in humans)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 14 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2001:341687 CAPLUS

DN 135:220840

TI Hepatic arterial infusion with oxaliplatin, folinic acid, and 5-fluorouracil in patients with hepatic metastases from colorectal cancer: role of carcino-embryonic antigen in assessment of response

AU Kern, Wolfgang; Beckert, Bettina; Lang, Nicola; Waggershauser, Tobias; Braess, Jan; Schalhorn, Andreas; Hiddemann, Wolfgang

CS University Hospital Grosshadern, Department of Medicine III, Ludwig-Maximilians-University, Munchen, 81366, Germany

SO Anticancer Research (2000), 20(6D), 4973-4975 CODEN: ANTRD4; ISSN: 0250-7005

PB International Institute of Anticancer Research

DT Journal

LA English

AB Background: Therapy for patients with hepatic metastases from colorectal cancer (CRC) remains controversial and may be improved by regional oxaliplatin which proved to be effective when administered systemically to patients with advanced CRC. Methods: During the current study, which aims to det. the max. tolerated dose, the dose-limiting toxicity, and the pharmacokinetics of oxaliplatin applied as hepatic intra-arterial infusion combined with folinic acid and 5-fluorouracil in patients with hepatic metastases from CRC, serial levels of carcino-embryonic antigen were detd. and their relationship to response to therapy was assessed. Results: Toxicity mainly consisted of nausea, pain, mucositis, sensorial neuropathy, diarrhea, and thrombocytopenia. The results of tumor marker analyses suggest that progressive disease may be detected early by increasing CEA levels and responsive disease may be characterized by low or decreasing values. Conclusions: Further analyses are warranted to det. the role of CEA in the assessment of response as compared to imaging techniques.

IT **61825-94-3**, Oxaliplatin

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(hepatic arterial infusion with oxaliplatin, folinic acid, and 5-fluorouracil in patients with hepatic metastases from colorectal

cancer)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2001:128247 CAPLUS

DN 135:162045

TI Quantification of tumor cell injury in vitro and in vivo using expression of green fluorescent protein under the control of the GADD153 promoter

AU Lin, Xinjian; Gately, Dennis P.; Hom, Doreen; Mishima, Misako; Los, Gerrit; Howell, Stephen B.

CS Department of Medicine and the Cancer Center, University of California at San Diego, La Jolla, CA, 92093-0058, USA

SO International Journal of Cancer (2001), 91(4), 555-562 CODEN: IJCNAW; ISSN: 0020-7136

PB Wiley-Liss, Inc.

DT Journal

LA English

The GADD153 gene is strongly transcriptionally activated by many types of AB cellular injury and the magnitude of the change in GADD153 expression is proportional to the extent of damage. We developed a novel reporter system in which a chimeric gene contg. the GADD153 promoter linked to the coding region of an enhanced green fluorescent protein (EGFP) gene was stably integrated into the genome of a clone of UMSCC10b head and neck carcinoma cells. Activation of the exogenous GADD153 promoter was quantified using flow cytometric measurement of EGFP expression following drug exposure. The exogenous GADD153 promoter in this clone was activated by N-methyl-N'-nitro-N-nitrosoguanidine (MNNG) in a concn.-dependent manner with kinetics that closely paralleled perturbation of cell cycle phase distribution. EGFP expression was strongly activated by a variety of genotoxic agents including DNA crosslinking and methylating agents, oxygen free radicals, DNA intercalator, UV and .gamma.-radiation and hypoxia. When grown as a xenograft in nude mice, the stably transfected clone also demonstrated dose-dependent EGFP expression when measured 4 days after cisplatin treatment. The reporter system accurately categorized the relative potency of adducts produced by 6 related platinum-contg. drugs. In conclusion, this reporter system can facilitate in vitro and in vivo screening for agents capable of producing cytotoxicity via a wide variety of different mechanisms, and can be utilized to investigate the relative potency of structurally related DNA adducts.

IT 61825-94-3, Oxaliplatin 62816-98-2, Tetraplatin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(quantification of tumor cell injury in vitro and in vivo using

expression of green fluorescent protein under the control of the GADD153 promoter)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN 62816-98-2 CAPLUS

CN Platinum, tetrachloro[rel-(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (OC-6-22)- (9CI) (CA INDEX NAME)

## RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2000:382161 CAPLUS

DN 133:150697

TI To What Extent Can Cyclometalation Promote Associative or Dissociative Ligand Substitution at Platinum(II) Complexes? A Combined Kinetic and Theoretical Approach

AU Plutino, Maria Rosaria; Scolaro, Luigi Monsu; Romeo, Raffaello; Grassi, Antonio

CS Dipartimento di Chimica Inorganica Chimica Analitica e Chimica Fisica e Istituto di Chimica e Tecnologia dei Prodotti Naturali (ICTPN-CNR) Sezione di Messina, Universita di Messina, Messina, 98166, Italy

SO Inorganic Chemistry (2000), 39(13), 2712-2720 CODEN: INOCAJ; ISSN: 0020-1669

PB American Chemical Society

DT Journal

LA English

OS CASREACT 133:150697

AB The ligand exchange rate consts. for the reactions [Pt(bph)(SR2)2] + 2\*SR2 .fwdarw. [Pt(bph)(\*SR2)2] + 2\*SR2 (bph = 2,2'-biphenyl dianion; R = Me, Et) and cis-[PtPh2(SMe2)2] + 2\*SMe2 .fwdarw. cis-[PtPh2(\*SMe2)2] + 2SMe2 have been detd. in CDCl3 as a function of ligand concn. and temp., by 1H NMR isotopic labeling and magnetization transfer expts. The rates of exchange show no dependence on ligand concn. and the kinetics are characterized by largely pos. entropies of activation. The kinetics of displacement of the thioethers from [Pt(bph)(SR2)2] with the dinitrogen

ligands 2,2'-bipyridine and 1,10-phenanthroline (N-N) to yield [Pt(bph)(N-N)], carried out in the presence of sufficient excess of thioether and N-N to ensure pseudo-first-order conditions, follow a nonlinear rate law kobsd = a[N-N]/(b[SR2] + [N-N]). The general pattern of behavior indicates that the rate-detq. step for substitution is the dissocn. of a thioether ligand and the formation of a three-coordinated [Pt(bph)(SR2)] intermediate. The value of the parameter a, which measures the rate of ligand dissocn., is const. and independent of the nature of N-N, and it is in reasonable agreement with the value of the rate of ligand exchange at the same temp. Theor. ab initio calcns. were performed for both [Pt(bph)(SMe2)2] and cis-[PtPh2(SMe2)2], and for their three-coordinated derivs. upon the loss of one SMe2 ligand. The latter optimize in a T-shaped structure. Calcns. were performed in the HF approxn. (LANL2DZ basis set) and refined by introducing the correlation terms (Becke3LYP model). The activation enthalpies from the optimized vacuum-phase geometries are 52.3 and 72.2 kJ mol-1 compared to the exptl. values in CDCl3 soln., 80 .+-. 1 and 93 .+-. 1 kJ mol-1 for [Pt(bph)(SMe2)2] and cis-[PtPh2(SMe2)2], resp. The electrostatic potential maps of both parent compds. show a remarkable concn. of neq. charge over the platinum atom which exerts a repulsion force on an axially incoming nucleophile. On the other hand, the strength of the org. carbanions trans to the leaving group and the stabilization of the T-shaped intermediate in the singlet ground state may also rationalize the preference for the dissociative mechanism. All of the kinetic and theor. data support the latter hypothesis and indicate, in particular, that dissocn. from the complex contg. the planar 2,2'-biphenyl dianion is easier than from its analog with single aryl ligands. Electron back-donation from filled d orbitals of the metal to empty .pi.\* of the in-plane cyclometalated rings is weak or absent and is not operative in promoting an associative mode of activation.

IT 287119-02-2P

RN 287119-02-2 CAPLUS

CN Platinum, [1,1'-biphenyl]-2,2'-diyl(1,10-phenanthroline-.kappa.N1,.kappa.N10)-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 2000:178392 CAPLUS

DN 132:303124

TI Antitumor effects of a novel lipophilic platinum complex (SM-11355) against a slowly-growing rat hepatic tumor after intra-hepatic arterial administration

AU .Kishimoto, Shuichi; Noguchi, Toshihiro; Yamaoka, Takashi; Fukushima,

Shoji; Takeuchi, Yoshikazu

- CS Department of Pharmaceutics, Faculty of Pharmaceutical Sciences, Kobe Gakuin University, Kobe, 651-2180, Japan
- SO Biological & Pharmaceutical Bulletin (2000), 23(3), 344-348 CODEN: BPBLEO; ISSN: 0918-6158
- Pharmaceutical Society of Japan PB
- DT Journal
- LA English
- The antitumor effects of cis[((1R,2R)-1,2-cyclohexanediamine-AB N,N')bis(myristato)] platinum(II) (SM-11355) were evaluated in a rat hepatic tumor model, and were compared with those of cisplatin (CDDP). A novel slowly-growing rat hepatic tumor model was established by the successive transplantation of rat AH109A tumor into the liver. The drugs, which were suspended in Lipiodol, were administered into the proper hepatic artery of tumor-bearing rats. Tumor growth was suppressed in the group that received SM-11355 suspended in Lipiodol (SM-11355/Lipiodol). Mean tumor growth rates in the groups administered 20 .mu.l of Lipiodol contg. 0, 0.02, 0.04, 0.1, 0.2, or 0.4 mg of SM-11355 were 244, 86, 110, 81, 51, and 40%, resp., 1 wk after treatment. Those in the groups administered 20 .mu.l of Lipiodol contg. 0.1, 0.2, or 0.4 mg of CDDP were 240, 110, and 45%, resp. In the groups administered 0.2 and 0.4 mg of SM-11355 or 0.4 mg of CDDP, massive necrosis was obsd. in the tumor tissue 1 wk after drug administration, and the tumors disappeared 4 wk after drug administration. Serum glutamic-oxaloacetic transaminase (GOT) and glutamic-pyruvic transaminase (GPT) levels were measured as markers of liver damage one day after the drug was administered into the hepatic artery of rats. The min. toxic dose, which raised serum GOT and GPT levels significantly compared with Lipiodol alone, was 0.2 mg for SM-11355/Lipiodol and 0.1 mg for CDDP/Lipiodol, resp. The results demonstrated that SM-11355/Lipiodol exerted antitumor activity at a dose that showed no hepatic toxicity in the rat model, but CDDP/Lipiodol did
- IT 141977-79-9, SM-11355

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antitumor effects of a novel lipophilic platinum complex (SM-11355) against a slowly-growing rat hepatic tumor after intra-hepatic arterial administration)

- 141977-79-9 CAPLUS RN
- CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']bis(tetradeca noato-.kappa.O)-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L30 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2003 ACS
- AN 2000:162755 CAPLUS
- DN133:53284
- ΤI Characterization of an ovarian carcinoma cell line resistant to cisplatin and flavopiridol

AU Bible, Keith C.; Boerner, Scott A.; Kirkland, Kathryn; Anderl, Kari L.; Bartelt, Duane, Jr.; Svingen, Phyllis A.; Kottke, Timothy J.; Lee, Yean K.; Eckdahl, Steven; Stalboerger, Paul G.; Jenkins, Robert B.; Kaufmann, Scott H.

CS Divisions of Medical Oncology, Mayo Medical School, Rochester, MN, 55905, USA

SO Clinical Cancer Research (2000), 6(2), 661-670 CODEN: CCREF4; ISSN: 1078-0432

PB American Association for Cancer Research

DT Journal

LA English

Flavopiridol, the first inhibitor of cyclin-dependent kinases to enter AΒ clin. trials, has shown promising antineoplastic activity and is currently undergoing Phase II testing. Little is known about mechanisms of resistance to this agent. In the present study, we have characterized an ovarian carcinoma cell line [OV202 high passage (hp)] that spontaneously developed drug resistance upon prolonged passage in tissue culture. Std. cytogenetic anal. and spectral karyotyping revealed that OV202 hp and the parental low passage line OV202 shared several marker chromosomes, confirming the relatedness of these cell lines. Immunoblotting demonstrated that OV202 and OV202 hp contained similar levels of a variety of polypeptides involved in cell cycle regulation, including cyclin-dependent kinases 2 and 4; cyclins A, D1, and E; and proliferating cell nuclear antigen. Despite these similarities, OV202 hp was resistant to flavopiridol and cisplatin, with increases of 5- and 3-fold, resp., in the mean drug concns. required to inhibit colony formation by 90%. In contrast, OV202 hp and OV202 displayed indistinguishable sensitivities to oxaliplatin, paclitaxel, topotecan, 1,3-bis(2-chloroethyl)-1-nitrosourea, etoposide, doxorubicin, vincristine, and 5-fluorouracil, suggesting that the spontaneously acquired resistance was not attributable to altered P-glycoprotein levels or a general failure to engage the cell death machinery. After incubation with cisplatin, whole cell platinum and platinum-DNA adducts measured using mass spectrometry were lower in OV202 hp cells than OV202 cells. Similarly, after flavopiridol exposure, whole cell flavopiridol concns. measured by a newly developed high performance liq. chromatog. assay were lower in OV202 hp cells. These data are consistent with the hypothesis that acquisition of spontaneous resistance to flavopiridol and cisplatin in OV202 hp cells is due, at least in part, to reduced accumulation of the resp. drugs. These observations not only provide the first characterization of a flavopiridol-resistant cell line but also raise the possibility that alterations in drug accumulation might be important in detg. sensitivity to this agent.

IT **61825-94-3**, Oxaliplatin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(ovarian carcinoma cell line resistant to cisplatin and flavopiridol)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1999:759928 CAPLUS

DN 132:201

TI Antitumoral activity of oxaliplatin/cisplatin-based combination therapy in cisplatin-refractory germ cell cancer patients

AU Soulie, P.; Garrino, C.; Bensmaine, M. A.; Bekradda, M.; Brain, E.; Di Palma, M.; Goupil, A.; Misset, J. L.; Cvitkovic, E.

CS Hopital Paul Brousse, FSMSIT, Villejuif, F-94800, Fr.

SO Journal of Cancer Research and Clinical Oncology (1999), 125(12), 707-711 CODEN: JCROD7; ISSN: 0171-5216

PB Springer-Verlag

DT Journal

LA English

AΒ

IT

Only 20-30% of patient with advanced germ cell tumors, relapsing after std. 1st-line therapy, are curable with current 2nd-line cisplatin-based regimens. New salvage combinations incorporating new active agents are needed. The authors report the toxicity/tolerance of a new salvage regimen based on the oxaliplatin (Eloxatin)/cisplatin combination, evaluated in patients with recurrent, mostly cisplatin-refractory germ cell tumors. 13 Patients were enrolled in this study. All except 1 had received cisplatin-based chemotherapy. 8 Had progressive disease as the best response on their last platinum-based chemotherapy, and 3 had potentially sensitive tumors. The median interval since the last platinum-based chemotherapy was 6 mo (range: 1-36 mo). 1 Untreated patient with poor prognosis was also enrolled. 12 Patients had pathol. markers [median .alpha.-fetoprotein 14 800 ng/mL (58-106), median human chorionic gonadotropin .beta. subunit 7000 IU/mL (37-723 700)]. Patients received either oxaliplatin (130 mg/m2) and cisplatin (100 mg/m2) every 3-4 wk (Bi regimen, 4 patients), or the same regimen combined with 1 to 4 of the following cytotoxic agents: ifosfamide, epirubicin, vinorelbine, methotrexate, dactinomycin, etoposide, and bleomycin (BiC regimen, 9 patients). Treatment was individualized according to each individual patient's pretreatment and clin. characteristics. 7 Objective responses were obtained (overall response rate=54%), all with the BiC regimens (2 complete and 5 partial responses). 2 Patients with recurrent disease achieved a long-term complete response lasting over 5 yr. 4 Partial responders were seen in the 8 cisplatin-refractory tumors, lasting 4-8 mo. All objective responses had a corroborating major decrease in tumor marker blood levels (median decrease: 99.7%). The median survival for the whole group was 8 mo. The commonest severe toxicity was hematol. (grade 4 neutropenia in 78% and thrombopenia in 74% of the BiC The combined salvage regimen induced antitumoral activity in recurrent, cisplatin-refractory germ cell tumors. Oxaliplatin merits further evaluation as a component of combination therapy for this disease. **61825-94-3**, Oxaliplatin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(oxaliplatin/cisplatin-based combination in germ cell cancer)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

## RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1999:548432 CAPLUS

DN 131:295021

TI Rapid fluorescence-based reporter-gene assays to evaluate the cytotoxicity and antitumor drug potential of platinum complexes

AU Sandman, Karen E.; Marla, Sudhakar S.; Zlokarnik, Gregor; Lippard, Stephen J.

CS Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA

SO Chemistry & Biology (1999), 6(8), 541-551 CODEN: CBOLE2; ISSN: 1074-5521

PB Current Biology Publications

DT Journal

LA English

AB The need for new platinum antitumor drugs is underscored by the usefulness of cisplatin and carboplatin in chemotherapy and the resistance of many tumors to these compds. Combinatorial chem. could aid in the search for cisplatin analogs if fast, high-throughput assays were available. Our goal was to develop rapid cell-based assays suitable for high-throughput screening that accurately predict the cytotoxicity of platinum complexes. We examd. the effects of platinum complexes and other agents on reporter-gene expression in cancer cells. HeLa Tet-On cells with inducible enhanced green fluorescent protein (EGFP) were prepd. Cisplatin and other cis-disubstituted platinum complexes inhibited EGFP expression, with a strong pos. correlation between EGFP inhibition and cytotoxicity. By contrast, trans-[Pt(NH3)2Cl2], other trans-platinum complexes, Me methanesulfonate or heat shock stimulated EGFP expression. Northern and nuclear run-on analyses revealed that the changes in EGFP expression were at the level of transcription. In another reporter-gene assay in Jurkat cells, cisplatin, but not trans-[Pt(NH3)2Cl2] or K2[PtCl4], inhibited .beta.-lactamase expression, as measured by hydrolysis of the fluorescent substrate CCF2. The EGFP results indicate that cytotoxic stress enhances transcription from the inducible promoter, whereas compds. able to form the 1,2-intrastrand platinum-DNA cross-links repress transcription. Both fluorescence-based reporter-gene assays afford promising new approaches to platinum anticancer drug discovery. ΙT 52691-24-4

RL: ANT (Analyte); ANST (Analytical study)
(rapid fluorescence-based reporter-gene assays for high-throughput screening of platinum complexes)

RN 52691-24-4 CAPLUS

CN Platinum, dichloro(1,2-cyclohexanediamine-.kappa.N,.kappa.N')-, (SP-4-2)- (9CI) (CA INDEX NAME)

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1999:376670 CAPLUS

DN 131:179315

TI Cellular pharmacology of the combination of the DNA topoisomerase I inhibitor SN-38 and the diaminocyclohexane platinum derivative oxaliplatin

AU Zeghari-Squalli, Nadia; Raymond, Eric; Cvitkovic, Esteban; Goldwasser, Francois

CS Institut Gustave Roussy, Villejuif, 94800, Fr.

SO Clinical Cancer Research (1999), 5(5), 1189-1196 CODEN: CCREF4; ISSN: 1078-0432

American Association for Cancer Research

DT Journal

PΒ

LA English

AB CPT-11, a DNA topoisomerase I inhibitor, and oxaliplatin, a diaminocyclohexane platinum deriv., are cytotoxic agents that have demonstrated clin. antitumor activity in colorectal cancer. Given the therapeutic potential of their combination, we studied the cellular pharmacol. of SN-38, the active metabolite of CPT-11, and oxaliplatin in the human colon cancer HT29 cell line. Growth inhibition was studied after a 1- or 24-h exposure to SN-38 or oxaliplatin, given alone or in combination. The cytotoxicity anal. by the isobolograms method elicited synergy. SN-38 delayed the reversion of oxaliplatin-induced DNA interstrand cross-links (ISCs), measured in cells by alk. elution. amt. of detectable ISCs 15 h after a 1-h exposure to 10 .mu.M oxaliplatin was 27% of the ISC peak levels and increased to 68% in the presence of 0.1 .mu.M SN-38. The presence of oxaliplatin DNA adducts led to a 3.3-fold increase in the SN-38-induced DNA elongation inhibition, as measured by pulse-labeling alk. elution. Inhibition of DNA and RNA synthesis was longer after exposure to the combination of oxaliplatin and SN-38 than after exposure to each agent alone. Consistently, flow cytometry analyses revealed that preexposure to oxaliplatin enhanced SN-38-induced S-phase arrest. Filter binding assays indicated that the cells arrested in S-phase at 48 h were undergoing apoptosis. Hence, supra-additive cytotoxicity appears related to major modifications in the cellular response to DNA damage rather than to changes in DNA damage formation. The combination of CPT-11 and oxaliplatin induced a 2-fold higher tumor growth redn. in vivo than did oxaliplatin alone at feasible nonlethal doses. This study provides a rationale for the optimal use of CPT-11 and oxaliplatin in combination.

IT **61825-94-3**, Oxaliplatin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cellular pharmacol. of combination of DNA topoisomerase I inhibitor SN-38 and diaminocyclohexane platinum deriv. oxaliplatin in colon

cancer cells)

RN61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 41 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2003 ACS

1999:211900 CAPLUS AN

DN 131:39115

TI High-performance liquid chromatographic separation of the biotransformation products of oxaliplatin

ΑU Luo, Feng R.; Yen, Ten-Yang; Wyrick, Steven D.; Chaney, Stephen G.

CS Lineberger Comprehensive Cancer Center, Curriculum in Toxicology, Department of Biochemistry and Biophysics, Curriculum in Toxicology, University of North Carolina at Chapel Hill, Chapel Hill, NC, 27599, USA

SO Journal of Chromatography, B: Biomedical Sciences and Applications (1999), 724(2), 345-356 CODEN: JCBBEP; ISSN: 0378-4347

PB Elsevier Science B.V.

DT Journal

LA English

AB A novel single reversed-phase HPLC system was developed for sepg. oxaliplatin and its biotransformation products formed in rat plasma. major stable biotransformation products of oxaliplatin formed in rat plasma were identified as Pt(dach)(Cys)2, Pt(dach)(Met) and free dach. The minor biotransformation products Pt(dach)Cl2, Pt(dach)(GSH) and Pt(dach)(GSH)2 could also be resolved from other Pt-dach complexes. these biotransformation products, the identification of Pt(dach)(Met) was further confirmed by LC-ESI-MS, and the identification of Pt(dach)(Cys)2, Pt(dach)(GSH), Pt(dach)(GSH)2 and free dach was confirmed by at. absorption and double isotope labeling. This HPLC technique should prove useful for sepg. and identifying the biotransformation products of Pt-dach drugs such as oxaliplatin, ormaplatin and Pt(dach) (mal) in biol. fluids. This will allow a more complete characterization of the pharmacokinetics and biotransformations of these Pt-dach drugs, which should in turn lead to a better understanding of the mechanisms leading to their toxicity and efficacy.

IT 38780-40-4 61825-94-3, Oxaliplatin 117405-09-1

225239-09-8 225239-11-2 225239-12-3

RL: ANT (Analyte); ANST (Analytical study)

(high-performance liq. chromatog. sepn. of biotransformation products of oxaliplatin)

RN 38780-40-4 CAPLUS

CN Platinum, dichloro(trans-1,2-cyclohexanediamine-.kappa.N,.kappa.N')-, (SP-4-2) - (9CI) (CA INDEX NAME)

RN 61825-94-3 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [ethanedioato (2-)-.kappa.O1,.kappa.O2]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN 117405-09-1 CAPLUS

CN Platinum(1+), [rel-(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'](L-methioninato-.kappa.N,.kappa.S)-, (SP-4-3)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \\ & \text{H}_2 & \text{S} \\ & \text{N} & \\ & \text{Pt}^{2+} \\ & \text{N} & \\ & \text{NH}_2 & \\ & \text{H}_2 & \\ \end{array}$$

RN 225239-09-8 CAPLUS

CN Platinate(2-), [rel-(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'][L-.gamma.-glutamyl-L-cysteinyl-.kappa.S-glycinato(3-)-.kappa.N]-, dihydrogen, (SP-4-3)- (9CI) (CA INDEX NAME)

RN 225239-11-2 CAPLUS

### ●2 H+

RN 225239-12-3 CAPLUS

#### ●4 H+

# RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L30 ANSWER 23 OF 39 CAPLUS COPYRIGHT 2003 ACS
- AN 1996:449487 CAPLUS
- DN 125:114833
- TI Rates of Dimethyl Sulfoxide Exchange in Monoalkyl Cationic Platinum(II) Complexes Containing Nitrogen Bidentate Ligands. A Proton NMR Study
- AU Romeo, Raffaello; Scolaro, Luigi Monsu; Nastasi, Nicola; Arena, Giuseppe
- CS Dipartimento di Chimica Inorganica, Universita di Messina, Messina, 98166,
- SO Inorganic Chemistry (1996), 35(17), 5087-5096 CODEN: INOCAJ; ISSN: 0020-1669
- PB American Chemical Society
- DT Journal

LA English

Monoalkyl square-planar complexes [Pt(N-N)Me(Me2SO)]PF6 (1-14), where N-N AΒ represents chelating diamines or diimines of widely different steric and electronic characteristics, were synthesized, and the complexes were fully characterized as solids and in soln. The substrates were tailored to offer only one site of exchange to a neutral mol., i.e. Me2SO, in a noncoordinating solvent. No evidence for fluxionality of the N-N ligands was found, except for the case of 11 formed by 2,9-dimethyl-1,10phenanthroline. In soln. this complex is fluxional with the phenanthroline oscillating between nonequivalent bidentate modes by a mechanism which involves rupture of the metal-N bond and rapid interconversion of two coordinatively unsatd. T-shaped 14-electron three-coordinate mol. fragments. Rates of this fluxion were measured by NMR spectroscopy from the exchange effects on the 1H signals of the Me and arom. hydrogens. The .DELTA.G.thermod. value for the fluxion is 49.6 .+-. 4 kJ mol-1. DMSO exchange with all the complexes was studied as a function of ligand concn. by 1H NMR line-broadening, isotopic labeling, and magnetization transfer expts. with deuterated acetone as the solvent. Second-order rate consts. were obtained from linear plots of kobs [Me2SO] and activation parameters were obtained from exchange expts. carried out at different temps. Second-order kinetics and neg. entropies of activation indicate an associative mechanism. lability of DMSO in the complexes depends in a rather unexpected and spectacular way upon the nature of the coordinate N-N ligands, the difference in reactivity between the 1st (N-N = N,N,N',N'-tetramethyl-1,2diaminoethane, k2298 = (1.15 .+-. 0.1) .times. 10-6 mol-1 s-1) and the last (N-N = 2,9-dimethyl-1,10-phenanthroline, k2298 = (3.81 .+-. 0.005).times. 104 mol-1 s-1) members of the series being >10 orders of magnitude, as a result of a known phenomenon of steric retardation (for the 1st complex) and an unprecedented case of steric acceleration (for the last complex). Other factors of primary importance in controlling the reactivity are (i) the presence of an extensive .pi. system on the ligand N-N, (ii) the ease with which this .pi. system interacts with non bonding d electrons of the metal, and (iii) the flexibility and ease of elongation of the chelate bite distance. The basicity plays a somewhat minor role, except in the restricted range of the same class of compds. such as substituted phenanthrolines.

IT 174286-38-5P, (Dimethyl sulfoxide-S) (methyl) (1,10phenanthroline) platinum(1+) hexafluorophosphate 179268-55-4P, (Dimethyl sulfoxide-S) (2,9-dimethyl-1,10-phenanthroline) (methyl)platinum(1 +) hexafluorophosphate 179268-57-6P, (Dimethyl sulfoxide-S) (methyl) (3,4,7,8-tetramethyl-1,10-phenanthroline) platinum(1+) hexafluorophosphate 179268-59-8P, (Dimethyl sulfoxide-S) (methyl) (5-nitro-1,10-phenanthroline)platinum(1+) hexafluorophosphate 179268-61-2P, (Dimethyl sulfoxide-S) (4,7-diphenyl-1,10phenanthroline) (methyl) platinum(1+) hexafluorophosphate RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent) (prepn. and kinetics and mechanism of exchange with DMSO) RN 174286-38-5 CAPLUS

Platinum(1+), methyl(1,10-phenanthroline-N1,N10)[sulfinylbis[methane]-S]-, (SP-4-2)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 174286-37-4 CMF C15 H17 N2 O Pt S CCI CCS

CM 2

CRN 16919-18-9 CMF F6 P CCI CCS

RN 179268-55-4 CAPLUS
CN Platinum(1+), (2,9-dimethyl-1,10-phenanthroline .kappa.N1,.kappa.N10)methyl[(sulfinyl-.kappa.S)bis[methane]]-, (SP-4-2)-,
 hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM I

CRN 179268-54-3 CMF C17 H21 N2 O Pt S CCI CCS

CM 2

CRN 16919-18-9 CMF F6 P

CCI CCS

RN 179268-57-6 CAPLUS

CN Platinum(1+), methyl[sulfinylbis[methane]-S](3,4,7,8-tetramethyl-1,10-phenanthroline-N1,N10)-, (SP-4-2)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 179268-56-5

CMF C19 H25 N2 O Pt S

CCI CCS

Me Me Me 
$$\frac{1}{N}$$
 Me  $\frac{1}{N}$   $\frac{$ 

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS

RN 179268-59-8 CAPLUS

CN Platinum(1+), methyl(5-nitro-1,10-phenanthroline-

N1,N10) [sulfinylbis[methane]-S]-, (SP-4-2)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 179268-58-7

CMF C15 H16 N3 O3 Pt S

$$\begin{array}{c|c} O_2N & & & \\ & N & & \\ & & Pt & \\ & Pt & \\ & Pt & \\ & & CH_3 & \\ & &$$

CCI CCS

CM 2

CRN 16919-18-9 CMF F6 P CCI CCS

RN 179268-61-2 CAPLUS
CN Platinum(1+), (4,7-diphenyl-1,10-phenanthroline N1,N10)methyl[sulfinylbis[methane]-S]-, (SP-4-2)-, hexafluorophosphate(1-)
 (9CI) (CA INDEX NAME)

CM 1

CRN 179268-60-1 CMF C27 H25 N2 O Pt S CCI CCS

CM 2

CRN 16919-18-9 CMF F6 P

L30 ANSWER 24 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1996:209307 CAPLUS

DN 124:306691

TI In vivo antitumor activity of cis-bis-neodecanoato-trans-R,R-1,2-diaminocyclohexane platinum(II) formulated in long-circulating liposomes
AU Mori, Atsuhide; Wu, Su-Ping; Han, Insook; Khokhar, Abdul R.; Perez-Soler,

Roman; Huang, Leaf

CS School Medicine, University Pittsburgh, Pittsburgh, PA, 15261, USA

SO Cancer Chemotherapy and Pharmacology (1996), 37(5), 435-44

CODEN: CCPHDZ; ISSN: 0344-5704

PB Springer

DT Journal

LA English

A lipophilic cisplatin deriv., cis-bisneodecanoato-trans-R,R-1,2-diaminocyclohexane platinum(II) (NDDP), was formulated in liposomes composed of phosphatidylcholine (PC) and cholesterol (Chol) addnl. contg. monosialoganglioside (GM1) or polyethyleneglycol conjugated to phosphatidylethanolamine (PGE-PE). These NDDP-contg. long-circulating liposomes were examd. for in vivo antitumor activity using the mouse RIF-1 solid tumor as a target residing outside the reticuloendothelial system (RES). Biodistribution studies, using C3H/HeJ mice and 111In-labeled DTPA-SA as a lipid marker, showed that the activity of GM1 and PEG-PE in prolonging the circulation times of liposomes was preserved in the presence of 3.0 mol% of NDDP in the liposome membranes. The high levels of liposomes remaining in the blood for PC/Chol/GM1 and PC/Chol/PEG3000-PE liposomes were assocd. with high levels of platinum in the blood as detd. by at. absorption

spectrophotometry. These NDDP-contq. long-circulating liposomes showed approx. a three-fold increase in tumor accumulation as compared to the conventional PC/Chol liposomes. In vitro cytotoxicity studies using RIF-1 tumor cells showed that the presence of PEG-PE, but not GM1, significantly enhanced the cytotoxicity of liposomal NDDP. RIF-1 tumor-bearing C3H/HeJ mice were treated twice with 25 mg/kg NDDP in various liposomal formulations on days 12 and 16 after tumor cell inoculation. A significant redn. in the tumor growth rate was obsd. when NDDP was formulated in PC/Chol/PEG3000-PE liposomes which support both efficient tumor accumulation and enhanced cytotoxicity of liposomal NDDP. On the other hand, NDDP formulated in PC/Chol/GM1 liposomes, which display only a high tumor accumulation, had no effect on the tumor growth rate. Furthermore, NDDP formulated in dimyristoylphosphatidylglycerol (DMPG) -contg. liposomes, exhibiting in vitro cytotoxicity comparable to NDDP formulated in PC/Chol/PEG3000-PE liposomes, but showing poor tumor accumulation, was also not effective. These results indicate a potential effectiveness of NDDP formulated in PEG-PE-contg. liposomes for therapy of tumors in non-RES organs.

IT 130197-73-8

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(tumor accumulation and cytotoxicity of neodecanoato-diaminocyclohexane platinum(II) in liposomes contg. polyethyleneglycol-phosphatidylethanolamine)

RN 130197-73-8 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']bis(2,2-dimethyloctanoato-.kappa.O)-, (SP-4-2)- (9CI) (CA INDEX NAME)

L30 ANSWER 25 OF 39 CAPLUS COPYRIGHT 2003 ACS

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AN 1996:175644 CAPLUS
DN 124:225268
TI Graft copolymer adducts of platinum (II) compounds, their preparation, and their therapeutic use
IN Bogdanov, Alexei; Weissleder, Ralph; Brady, Thomas J.
PA General Hospital Corp., USA
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SO PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO. DATE WO 9600079 19960104 WO 1995-US7329 PΙ A1 19950607 W: AT, AU, CA, CN, CZ, FI, GE, HU, JP, KR, MX, NO, NZ, PL, RU, SG, UA, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE A1 19960119 AU 1995-27013 AU 9527013 19950607

RN

CN

	US	5871710	Α	19990216	US	1996-738177	19961028
PRAI	US	1994-267150	A1	19940627			
	US	1992-940590	B1	19920904			
	US	1994-250635	A2	19940527			
	WO	1995-US7329	W	19950607			
os	MAI	RPAT 124:225268					

AB A biocompatible graft co-polymer adduct includes a polymeric carrier, a protective chain linked to the polymeric carrier, a reporter group liked to the carrier or to the carrier and the protective chain, and a reversibly linked Pt(II) compd. Also disclosed is a method of treating a disease in a patient, particularly cancer, by administering to the patient a therapeutically effective amt. of the adduct, and may include scanning the patient using an imaging technique which can provide a visible image of the distribution of the adduct. Prepn. of e.g. a cDDP adduct with methoxyPEG-poly-L-lysine succinate is described. Data are included for cytotoxicity of a graft copolymer adduct against human mammary adenocarcinoma. Detn. of biodistribution of indium-111-labeled polymers is also included.

IT 65296-81-3D, DACCP, adducts with graft copolymer 76319-02-3D, adducts with graft copolymer

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (graft copolymer-platinum compd. adduct prepn. and therapeutic use) 65296-81-3 CAPLUS

Platinate(1-), [1,2,4-benzenetricarboxylato(3-).kappa.O1,.kappa.O2][(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-,
hydrogen, (SP-4-3)- (9CI) (CA INDEX NAME)

О н+

L30 ANSWER 26 OF 39 CAPLUS COPYRIGHT 2003 ACS AN 1995:872807 CAPLUS

DN 123:329197

TI Organ-specific biotransformation of ormaplatin in the Fischer 344 rat

AU Thompson, D. Charles; Vaisman, Alexandra; Sakata, Michael K.; Wyrick, Steven D.; Holbrook, David J.; Chaney, Stephen G.

CS School Medicine, University North Carolina, Chapel Hill, NC, 27599, USA

SO Cancer Chemotherapy and Pharmacology (1995), 36(5), 439-47 CODEN: CCPHDZ; ISSN: 0344-5704

PB Springer

DT Journal

LA English

AΒ The intracellular biotransformation products of ormaplatin (tetraplatin) were examd. in the liver, kidneys, spleen, small intestine, and plasma of the adult male Fischer 344 rat. Previous studies had established that the rank order of ormaplatin toxicity in Fischer 344 rats is spleen .apprxeq. gastrointestinal tract > kidney > liver. Animals were given 3Hlabeled drug i.v. at 12.5 mg/kg, and tissues were harvested 30 min later. The kidneys concd. total and cytosolic Pt to a greater extent than any of the other tissues. The abs. amt. of cytosolic Pt, in micrograms per g tissue, that was irreversibly bound to protein and/or other macromols. was also greatest in the kidneys. However, when the amt. bound was expressed as percentage of the total cytosolic Pt, the amt. in the kidneys was lower than that in any other tissue. Of the various low-mol.-mass Pt biotransformation species characterized, by far the most abundant were complexes of Pt with the S-contg. mols. cysteine, methionine, and glutathione (GSH). There was more of the methionine complex in the blood plasma than in any of the tissues except for the spleen. No significant differences among the tissues were detected for the dichloro, cysteine, methionine, or GSH complexes. The 3Hlabeled diaminocyclohexane (DACH) carrier ligand appeared to remain stably bound to the Pt while in the plasma, as there was less free DACH ligand detected in plasma ultrafiltrate than in any tissue ultrafiltrate. In the tissues, the free DACH levels were in the range of 20% of the radioactivity recovered from the HPLC column, and there were no significant differences among the tissues studied. Consequently, neither biodistribution nor tissue-specific biotransformation of ormaplatin provides a ready explanation for the tissue specificity of ormaplatin toxicity in Fischer 344 rats. However, in the kidneys there was much less of the reactive PtCl2(DACH) species than has previously been reported for the corresponding Pt(NH3)2Cl2 species in cisplatin-treated rats. Thus, these data suggest a possible explanation for the differences in the nephrotoxicity of cisplatin vs. ormaplatin.

IT **62816-98-2**, Ormaplatin

RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(organ-specific ormaplatin biotransformation and toxicity)

RN 62816-98-2 CAPLUS

CN

Platinum, tetrachloro[rel-(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (OC-6-22)- (9CI) (CA INDEX NAME)

AN 1995:531867 CAPLUS

DN 123:74098

TI Generation of a drug resistance profile by quantitation of mdr-1/P-glycoprotein in the cell lines of the National Cancer Institute Anticancer Drug Screen

AU Alvarez, Manuel; Paull, Ken; Monks, Anne; Hose, Curtis; Lee, Jong-Seok; Weinstein, John; Grever, Mike; Bates, Susan; Fojo, Tito

CS Lab. Mol. Pharmacol., Developmtl. Therapeutics Program, National Cancer Institute, National Institutes Health, Bethesda, MD, 20892, USA

SO Journal of Clinical Investigation (1995), 95(5), 2205-14 CODEN: JCINAO; ISSN: 0021-9738

PB Rockefeller University Press

DT Journal

LA English

AΒ Identifying new chemotherapeutic agents and characterizing mechanisms of resistance may improve cancer treatment. The Anticancer Drug Screen of the National Cancer Institute uses 60 cell lines to identify new agents. Expression of mdr-1/P-glycoprotein was measured by quant. PCR. Expression was detected in 39 cell lines; the highest levels were in renal and colon carcinomas. Expression was also detected in all melanomas and central nervous system tumors, but in only one ovarian carcinoma and one leukemia cell line. Using a modified version of the COMPARE program, a high correlation was found between expression of mdr-1 and cellular resistance to a large no. of compds. Evidence that these compds. are P-glycoprotein substrates includes: (a) enhancement of cytotoxicity by verapamil; (b) demonstration of cross-resistance in a multidrug-resistant cell line, (c) ability to antagonize P-glycoprotein, increasing vinblastine accumulation by decreasing efflux; and (d) inhibition of photoaffinity labeling by azidopine. Identification of many heretofore unrecognized compds. as substrates indicates that P-glycoprotein has a broader substrate specificity than previously recognized. This study confirms the validity of this novel approach and provides the basis for similar studies examg. a diverse group of gene products, including other resistance mechanisms, putative drug targets, and genes involved in the cell cycle and apoptosis. IT **62816-98-2**, Tetraplatin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(generation of a drug resistance profile by quantitation of mdr-1/P-glycoprotein in the cell lines of the National Cancer Institute Anticancer Drug Screen)

RN 62816-98-2 CAPLUS

CN Platinum, tetrachloro[rel-(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (OC-6-22)- (9CI) (CA INDEX NAME)

L30 ANSWER 28 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1991:464164 CAPLUS

DN 115:64164

TI Characterization of binding proteins from ovarian carcinoma and kidney tubule cells that are specific for cisplatin modified DNA

so

AU Andrews, Paul A.; Jones, Jeffrey A.

CS Cancer Cent., Univ. California, San Diego, La Jolla, CA, 92093, USA

Cancer Communications (1991), 3(1), 1-10

CODEN: CNCMET; ISSN: 0955-3541

DT Journal

LA English

AB Proteins were detected in nuclear exts. from ovarian carcinoma cells and kidney tubule cells that bind specifically to platinated DNA. A 123-bp restriction fragment was platinated with cisplatin (DDP) to a formal molar platinum to nucleotide ratio of 0.05 and end-labeled with [32P]-dCTP. Incubation with nuclear exts. from 2008 human ovarian carcinoma cells caused shifts in the mobility of this probe in non-denaturing polyacrylamide gels. Proteinase K, but not RNase A, destroyed the bands. Comparison of the shifted bands generated by DDP-resistant 2008 and A2780 human ovarian carcinoma cell nuclear exts. with bands from the corresponding sensitive cells showed no differences in protein levels. The affinity of the proteins for the probe was the same in sensitive and resistant 2008 nuclear exts. as detd. by competition with platinated salmon sperm DNA. These proteins also bound to a probe damaged with 1,2-diaminocyclohexaneplatinum(II) dichloride but did not bind to a trans-DDP-platinated probe. No differences were found in the levels in UV4 or UV5 Chinese hamster ovary cells, which were hypersensitive to DDP compared to wild-type AA8 cells. MDCK and LLC-PK1 kidney tubule cells, which were more resistant to DDP cytotoxicity than 2008 cells, exhibited decreased levels of these proteins. Although these proteins that recognize DDP damage in DNA may be involved in excision repair, their levels did not correlate with DDP sensitivity in this panel of cell lines. IT 52691-24-4

RL: BIOL (Biological study)

(DNA modification by, proteins binding after, in tumor and kidney tubule cells of humans and lab. animals)

RN 52691-24-4 CAPLUS

CN Platinum, dichloro(1,2-cyclohexanediamine-.kappa.N,.kappa.N')-, (SP-4-2)- (9CI) (CA INDEX NAME)

L30 ANSWER 29 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1991:254 CAPLUS

DN 114:254

TI Synthesis of [195mPt]-tetraplatin

AU Wyrick, Steven D.; Chaney, Stephen G.

CS Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA

SO Journal of Labelled Compounds and Radiopharmaceuticals (1990), 28(7), 753-6

CODEN: JLCRD4; ISSN: 0362-4803

DT Journal

LA English

AB (trans-d,l)-1,2-Diaminocyclohexanetetrachloroplatinum(IV) (tetraplatin) is a 2nd generation Pt antitumor agent which exhibits less toxicity than cisplatin and is effective in cell lines with acquired resistance to cisplatin. The synthesis of tritium-labeled tetraplatin which was utilized in both tissue culture and in vivo studies has previously

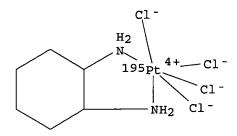
been reported. Loss of the **labeled** diaminocyclohexane carrier moiety during the in vivo studies necessitated the synthesis of [195MPt]tetraplatin from K [195Pt]hexachloroplatinate as described herein.

IT 130812-33-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of metastable, antitumor activity in relation to)

RN 130812-33-8 CAPLUS

CN Platinum-195Pt, tetrachloro(1,2-cyclohexanediamine-N,N')-, [OC-6-22-(trans)]- (9CI) (CA INDEX NAME)



L30 ANSWER 30 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1989:87968 CAPLUS

DN 110:87968

TI Distribution and activity of antineoplastic drugs in a tumor model

AU Durand, Ralph E.

CS Med. Biophys. Unit, B.C. Cancer Res. Cent., Vancouver, BC, V5Z 1L3, Can.

SO Journal of the National Cancer Institute (1989), 81(2), 146-52 CODEN: JNCIEQ; ISSN: 0027-8874

DT Journal

LA English

AB Antineoplastic drugs can be effective in solid tumors only if they can penetrate several cell layers and retain their activity in the tumor microenvironment. The distribution of 5 chemotherapeutic agents was evaluated in V79 Chinese hamster cells grown as spheroids. The delivery and toxicity of radioactively labeled 5-fluorouracil, lomustine, tetraplatin, and chlorambucil were detd. by use of cell-sorting techniques to select cells as a function of their position (depth) within these spheroids, and the delivery and toxicity of doxorubicin (DOX) were evaluated on the basis of fluorescence intensity. Simultaneous measurement of drug level and toxicity in cells at the time of recovery from different depths within the spheroids led to the conclusion that drug delivery was a problem only for DOX. Several of the other agents showed a dissocn. between cellular drug levels and activity, implicating a major role of the cellular microenvironment in modulating drug toxicity.

IT **62816-98-2**, Tetraplatin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(distribution and antitumor activity of, in spheroids)

RN 62816-98-2 CAPLUS

CN Platinum, tetrachloro[rel-(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (OC-6-22)- (9CI) (CA INDEX NAME)

L30 ANSWER 31 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1989:23375 CAPLUS

DN 110:23375

TI Tritiated platinum antitumor agents containing the trans-(d,1)-1,2-diaminocyclohexane carrier ligand

AU Wyrick, Steven D.; Chaney, Stephen G.

CS Sch. Med., Univ. North Carolina, Chapel Hill, NC, 27514, USA

SO Journal of Labelled Compounds and Radiopharmaceuticals (1988), 25(4), 349-57

CODEN: JLCRD4; ISSN: 0362-4803

DT Journal

LA English

OS CASREACT 110:23375

GI

AB Four T-labeled diaminocyclohexane-Pt complexes I (R = Cl, NO3), II, and III were prepd. from K2PtCl4 and the corresponding tritiated trans-diaminocyclohexane. This compd. was prepd. in turn by catalytic redn. of the diaminocyclohexene precursor with carrier-free T gas over 10% Pd-C.

IT 60732-70-9P 118139-88-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and complexation of, with malonic acid)

RN 60732-70-9 CAPLUS

CN Platinum, (trans-1,2-cyclohexanediamine-.kappa.N,.kappa.N')bis(nitrato-.kappa.O)-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN 118139-88-1 CAPLUS

CN Platinum, (1,2-cyclohexane-4,5-t2-diamine-N,N')bis(nitrato-0)-, [SP-4-3-(1.alpha.,2.beta.,4.alpha.,5.alpha.)]- (9CI) (CA INDEX NAME)

IT 52351-07-2P 62816-98-2P 118073-77-1P

118139-89-2P

RN 52351-07-2 CAPLUS

CN Platinum, [rel-(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [propanedioato(2-)-.kappa.O1,.kappa.O3]-, (SP-4-2)-(9CI) (CA INDEX NAME)

RN 62816-98-2 CAPLUS

CN Platinum, tetrachloro[rel-(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (OC-6-22)- (9CI) (CA INDEX NAME)

RN 118073-77-1 CAPLUS

CN Platinum, tetrachloro(1,2-cyclohexane-4,5-t2-diamine-N,N')-, [OC-6-33-(1.alpha.,2.beta.,4.alpha.,5.alpha.)]- (9CI) (CA INDEX NAME)

118139-89-2 CAPLUS RN

Platinum, (1,2-cyclohexane-4,5-t2-diamine-N,N')[propanedioato(2-)-0,0']-, CN[SP-4-3-(1.alpha., 2.beta., 4.alpha., 5.alpha.)] - (9CI) (CA INDEX NAME)

IT 38780-40-4P 118139-87-0P

> RL: SPN (Synthetic preparation); PREP (Preparation) (prepn., oxidative addn. reaction with chlorine, and nitration of) 38780-40-4 CAPLUS

RN

Platinum, dichloro(trans-1,2-cyclohexanediamine-.kappa.N,.kappa.N')-, CN(SP-4-2)-(9CI) (CA INDEX NAME)

RN118139-87-0 CAPLUS

CN Platinum, dichloro[rel-(1R,2R,4S,5R)-1,2-cyclohexane-4,5-t2-diamine-.kappa.N,.kappa.N']-, (SP-4-3)- (9CI) (CA INDEX NAME)

AN 1988:105862 CAPLUS

DN 108:105862

TI Study of drug metabolism by determining the ratio of radioactive intensities in double-labeled pharmaceuticals

AU Fang, Qinglong; Song, Jiancong; Yi, Mingguang

CS Shandong Acad. Med. Sci., Peop. Rep. China

SO Hejishu (1987), 10(8), 57-8 CODEN: NUTEDL; ISSN: 0253-3219

DT Journal

LA Chinese

AB [3H,35S]cyclohexanediamine platinum sulfate was given i.p. to rats. The pharmacokinetics of the double-labeled drug were detd. by the radioactivity ratio (35S/3H) in the body (the lung, spleen, heart, liver, muscle, kidneys, and tumor tissues). Drug metab. in the body can be studied by using the double-labeled technique.

IT 61593-75-7

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
 (metab. of, double-labeled radioactivity for study of)

RN 61593-75-7 CAPLUS

CN Platinum, (1,2-cyclohexanediamine-.kappa.N1,.kappa.N1') [sulfato(2-)-.kappa.O,.kappa.O']-, (SP-4-2)- (9CI) (CA INDEX NAME)

L30 ANSWER 33 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1987:226285 CAPLUS

DN 106:226285

TI Platinum complexes of vitamin C. NMR studies on the solution chemistry of cis-platinum(diamine) (ascorbate) complexes

AU Hollis, L. Steven; Stern, Eric W.; Amundsen, Alan R.; Miller, Arthur V.; Doran, Sheryl L.

CS Engelhard Corp., Edison, NJ, 08818, USA

SO Journal of the American Chemical Society (1987), 109(12), 3596-602 CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

The reaction between Na ascorbate (Na2Asc) and cis-[PtL2(H2O)2](NO3)2 (L = NH3-15N, 0.5 en-15N2, or 1,2-diaminocyclohexane (dach)) was studied by 195Pt and 13C NMR spectroscopy. The reaction between [Pt(en-15N2)(H2O)2]2+ and aq. Na2Asc produces [Pt(en-15N2)(H2O)(O3-HASc)]+, [Pt(en-15N2)(O3-HASc)2], and [Pt(en-15N2)(O2,O3-Asc)] initially (t < 1 h). The reaction ultimately produces 2 C-bound ascorbate complexes: [Pt(en-15N2)(C2,O5-Asc)](I) and [Pt(en-15N2)(C2-HASc)(O3-HASc)] (II). The C-bound ascorbate ligand in I and II is bound to Pt (at C2) through the re and si face, resp. Analogous products are obtained in the reaction when the diamine ligand is trans-R,R-dach, trans-S,S-dach, or cis-dach. An addnl. product is obsd. when the reaction is run with cis-[Pt(15NH3)2(H2O)2]2+. In this case, NH3 release occurs at a site trans to a C2-bound ascorbate ligand. Correlations between the 195Pt-15N coupling

consts. and the ligand donor strength of the C2-bound ascorbate ligand are

used to explain the NH3 release. In each of the diamine cases, a diastereofacial selectivity for substitution at the re face (re:si = 1.5-3.3) of the ascorbate anion is obsd.

IT 91897-69-7P 106160-56-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and NMR of)

RN 91897-69-7 CAPLUS

CN Platinum, (1,2-cyclohexanediamine-N,N') [L-lyxo-3-hexulosonic acid .gamma.-lactonato(2-)-C2,O5]-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 106160-56-9 CAPLUS

CN Platinum, [(1S,2S)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'] [L-lyxo-3-hexulosonic acid .gamma.-lactonato(2-)-.kappa.C2,.kappa.O5]-, (SP-4-2)-(9CI) (CA INDEX NAME)

IT 91897-69-7P 96392-06-2P 96392-07-3P

108007-13-2P 108100-82-9P 108100-83-0P

108100-84-1P 108100-85-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and platinum-195 NMR of)

RN 91897-69-7 CAPLUS

CN Platinum, (1,2-cyclohexanediamine-N,N') [L-lyxo-3-hexulosonic acid .qamma.-lactonato(2-)-C2,O5]-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 96392-06-2 CAPLUS

Platinum, bis(L-ascorbato-O3)(1,2-cyclohexanediamine-N,N')-, CN [SP-4-2-(1R-trans)] - (9CI) (CA INDEX NAME)

HO-CH<sub>2</sub>-CH OH OH OH OH 
$$CH$$
-CH<sub>2</sub>-OH  $NH$ 2  $NH$ 3  $NH$ 4  $NH$ 5  $NH$ 6  $NH$ 9  $NH$ 

RN 96392-07-3 CAPLUS

CN Platinum, bis(L-ascorbato-O3)(1,2-cyclohexanediamine-N,N')-, [SP-4-2-(1S-trans)] - (9CI) (CA INDEX NAME)

RN

108007-13-2 CAPLUS Platinum(1+), aqua(L-ascorbato-O3)(1,2-cyclohexanediamine-N,N')-, CN[SP-4-3-(1R-trans)]- (9CI) (CA INDEX NAME)

RN108100-82-9 CAPLUS

CNPlatinum, (L-ascorbato-O3)(1,2-cyclohexanediamine-N,N')(L-lyxo-3hexulosonic acid .gamma.-lactonato-C2)-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

RN 108100-83-0 CAPLUS

CN Platinum(1+), aqua(1,2-cyclohexanediamine-N,N')(L-ascorbato-O3)-, [SP-4-3-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 108100-84-1 CAPLUS

CN Platinum, [L-ascorbato(2-)-O2,O3](1,2-cyclohexanediamine-N,N')-, [SP-4-3-(1S-trans)]- (9CI) (CA INDEX NAME)

RN 108100-85-2 CAPLUS

CN Platinum, (L-ascorbato-O3)(1,2-cyclohexanediamine-N,N')(L-lyxo-3hexulosonic acid .gamma.-lactonato-C2)-, [SP-4-2-(1S-trans)]- (9CI) (CA
INDEX NAME)

IT 106091-83-2P 106160-57-0P 107984-65-6P

> RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN

106091-83-2 CAPLUS
Platinum, (1,2-cyclohexanediamine-N,N') [L-lyxo-3-hexulosonic acid CN .gamma.-lactonato(2-)-C2,O5]-, [SP-4-3-(cis)]- (9CI) (CA INDEX NAME)

106160-57-0 CAPLUS

Platinum, (1,2-cyclohexanediamine-N,N') [L-lyxo-3-hexulosonic acid CN.gamma.-lactonato(2-)-C2,O5]-, [SP-4-2-(cis)]- (9CI) (CA INDEX NAME)

107984-65-6 CAPLUS RN

Platinum, (1,2-cyclohexanediamine-N,N')[2,3-dihydroxy-4,4,5,5-tetramethyl-CN2-cyclopenten-1-onato(2-)-02,03]-, [SP-4-3-(trans)]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ N & & \\ & &$$

IT 81473-15-6

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of racemic, with tetramethylreductic acid)

RN 81473-15-6 CAPLUS

CN Platinum(2+), diaqua(1,2-cyclohexanediamine-N,N')-, [SP-4-2-(trans)]-, dinitrate (9CI) (CA INDEX NAME)

CM 1

CRN 63130-06-3 CMF C6 H18 N2 O2 Pt CCI CCS

$$\begin{array}{c|c} & \text{H}_2 & \text{OH}_2 \\ & \text{N} & \\ & \text{Pt} & \text{2+} \\ & & \text{OH}_2 \\ & & \text{NH}_2 \end{array}$$

CM 2

CRN 14797-55-8 CMF N O3

IT 94042-09-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with ascorbic acid)

RN 94042-09-8 CAPLUS

CN Platinum(2+), diaqua(1,2-cyclohexanediamine-N,N')-, [SP-4-2-(1S-trans)]-, dinitrate (9CI) (CA INDEX NAME)

CM 1

CRN 89955-87-3 CMF C6 H18 N2 O2 Pt CCI CCS

CM 2

CRN 14797-55-8 CMF N O3

IT 94042-07-6

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with sodium ascorbate)

RN 94042-07-6 CAPLUS

CN Platinum(2+), diaqua(1,2-cyclohexanediamine-N,N')-, [SP-4-3-(cis)]-, dinitrate (9CI) (CA INDEX NAME)

CM 1

CRN 89955-89-5 CMF C6 H18 N2 O2 Pt CCI CCS

$$\begin{array}{c|c} & \text{H}_2 & \text{OH}_2 \\ & \text{N} & \text{Pt} \xrightarrow{2+} \text{OH}_2 \\ & & \text{NH}_2 \end{array}$$

CM 2

CRN 14797-55-8 CMF N O3

IT 94042-08-7

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction with ascorbic acid and platinum-195 NMR of)

RN 94042-08-7 CAPLUS

CN Platinum(2+), diaqua[(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (SP-4-2)-, dinitrate (9CI) (CA INDEX NAME)

CM :

CRN 89955-85-1 CMF C6 H18 N2 O2 Pt CCI CCS

$$\begin{array}{c|c} & \text{H}_2 & \text{OH}_2 \\ & \text{N} & \text{Pt} & \text{2+} \\ & & \text{N} & \text{H}_2 \end{array}$$

CM 2

CRN 14797-55-8 CMF N O3

L30 ANSWER 34 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1987:55730 CAPLUS

DN 106:55730

TI Effects on the monocyte-macrophage system and antitumor activity against L1210 leukemia of cis-bis-cyclopentenecarboxylato-trans-R,R-1,2-diaminocyclohexaneplatinum(II) encapsulated in multilamellar vesicles

AU Perez-Soler, Roman; Khokhar, Abdul R.; Claringbold, Phillip; Kasi, Leela P.; Lopez-Berestein, Gabriel

CS System Cancer Cent., Univ. Texas, Houston, TX, 77030, USA

SO JNCI, Journal of the National Cancer Institute (1986), 77(5), 1137-43 CODEN: JJIND8; ISSN: 0198-0157

DT Journal

LA English

GI

AB Multilamellar vesicles (MLVs) composed of dimyristoylphosphatidylcholine and dimyristoylphosphatidylglycerol at a molar ratio of 7:3 were used as carriers of cis-bis-cyclopentenecarboxylato-trans-R,R-1,2-diaminocyclohexaneplatinum (II) (I) [106402-46-4]. The encapsulation efficiency of liposomal I (L-I) was 87.6%, and its stability in normal saline at 14 days was 94.4%. The in vitro and in vivo effects on the function of the monocyte-macrophage system and the antitumor activity against L1213 leukemia were investigated in CD-1 and (C57BL/6J

.times. DBA/2J)F1 mice. L-I and cisplatin (CDDP) caused a comparable inhibition of murine-resident peritoneal macrophage (PM) protein, RNA synthesis and superoxide anion release. PM-mediated tumor cell cytotoxicity was completely inhibited at a concn. of 10 .mu.g CDDP and L-I/mL but not at concns. of 1 and 5 .mu.g/mL. The differences in plasma clearance of 99mTc-labeled MLV and phagocytic capacity of the liver among animals pretreated with the max. tolerated doses of L-I (25 mg-kg), empty liposomes, or CDDP (10 mg/kg) were not statistically significant (plasma clearance: 105, 110, and 100% of control, resp.; liver uptake: 87, 96, and 104% of control, resp. At the max. tolerated doses, the antitumor activity of L-I against L 1210 leukemia was similar to that of CDDP when a single dose was administered [median survival of treated mice/median survival of control mice .times. 100 (%T/C): 181 vs. 175] and slightly higher with the use of a triple-dose schedule (%T/C: 275 vs. 225). L-I is easy to prep., has a high-encapsulation efficiency and stability, is not more toxic than CDDP to the monocyte-macrophage system, and is at least as effective as CDDP against L1210 leukemia.

## IT 106402-46-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and monocyte-macrophage system effect on antitumor activity of liposome encapsulated)

RN 106402-46-4 CAPLUS

CN Platinum, (1,2-cyclohexanediamine-N,N')bis(1-cyclopentene-1-carboxylato-0)-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

## IT 62011-40-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with barium cyclopentenecarboxylate)

RN 62011-40-9 CAPLUS

CN Platinum, (1,2-cyclohexanediamine-N,N') [sulfato(2-)-O,O']-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

# IT 61848-66-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prepn. and sulfate exchange of)

RN 61848-66-6 CAPLUS

L30 ANSWER 35 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1987:62 CAPLUS

DN 106:62

TI High-performance liquid chromatographic separation of platinum complexes containing the cis-1,2-diaminocyclohexane carrier ligand

AU Mauldin, Stanley K.; Richard, Fred A.; Plescia, Marcus; Wyrick, Steven D.; Sancar, Aziz; Chaney, Stephen G.

CS Sch. Med., Univ. North Carolina, Chapel Hill, NC, 27514, USA

SO Analytical Biochemistry (1986), 157(1), 129-43 CODEN: ANBCA2; ISSN: 0003-2697

DT Journal

LA English

A 2-column HPLC system which can be used to sep. many likely AΒ 1,2-diaminocyclohexane (dach)-Pt biotransformation products from the parent compds. and allow their identification is described. An initial sepn. on a reverse-phase Partisil ODS-3 column allowed resoln. of the uncharged species. The peak fractions from this column were concd. 10-fold and reinjected onto a cation exchange Partisil 10 SCX column to allow resoln. of the pos.-charged species. This system allowed resoln. of 2 prototype dach-Pt drugs, (cis-1,2-diaminocyclohexane)dichloroplatinum(II [61848-70-2] and (cis-1,2-diaminocyclohexane) malonatoplatinum [61848-63-3], the aquated species likely to form from these drugs, and the complexes formed when these compds. react with glutathione, metallothionein, and amino acids. By using cation-exchange chromatog. at pH 2.3 as well as pH 4 and by using 14C-labeled amino acids to det. stoichiometry, it was also possible to det. the most likely structures for some of the amino acid complexes. Most importantly, this system allowed clear sepn. of many of the likely biotransformation products tested from the biol. important aquated species. This system should prove useful for sepg. and identifying the biotransformation products of dach-Pt drugs in blood and urine, in tissue culture media, and inside the cell.

IT 103477-16-3 105561-03-3

RL: ANT (Analyte); ANST (Analytical study)

(detn. of, as diaminocyclohexane platinum complex metabolite, by HPLC)

RN 103477-16-3 CAPLUS

CN Platinum, (1,2-cyclohexanediamine-N,N')dihydroxy-, [SP-4-3-(cis)]- (9CI) (CA INDEX NAME)

RN 105561-03-3 CAPLUS

CN Platinum(1+), aqua(1,2-cyclohexanediamine-N,N')hydroxy-, [SP-4-4-(cis)]- (9CI) (CA INDEX NAME)

IT 105306-81-8 105306-82-9 105451-47-6

105451-48-7

RL: FORM (Formation, nonpreparative)

(formation of, in diaminocyclohexane platinum complex metab.)

RN 105306-81-8 CAPLUS

CN Platinum(1+), (1,2-cyclohexanediamine-N,N')(L-serinato-O1,O3)-, [SP-4-4-(cis)]- (9CI) (CA INDEX NAME)

RN 105306-82-9 CAPLUS

CN Platinum(1+), (1,2-cyclohexanediamine-N,N')(L-serinato-N,O3)-, monohydrogen, [SP-4-4-(cis)]- (9CI) (CA INDEX NAME)

H+

RN 105451-47-6 CAPLUS

CN Platinum, (1,2-cyclohexanediamine-N,N')bis(L-methioninato-S)-, conjugate diacid, [SP-4-3-(cis)]- (9CI) (CA INDEX NAME)

●2 H+

RN 105451-48-7 CAPLUS

CN Platinum(1+), (1,2-cyclohexanediamine-N,N')(L-methioninato-N,S)-, monohydrogen, [SP-4-4-(cis)]- (9CI) (CA INDEX NAME)

● H+

IT 61848-63-3P 61848-70-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and detn. and metab. of, amino acid complexes formation and
HPLC in relation to)

RN 61848-63-3 CAPLUS

CN Platinum, (1,2-cyclohexanediamine-N,N') [propanedioato(2-)-O,O']-, [SP-4-3-(cis)]- (9CI) (CA INDEX NAME)

RN 61848-70-2 CAPLUS

CN Platinum, dichloro[rel-(1R,2S)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']-, (SP-4-3)- (9CI) (CA INDEX NAME)

IT 105451-49-8P 105471-16-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and detn. of, as diaminocyclohexane platinum complex metabolite by HPLC)

RN 105451-49-8 CAPLUS

CN Platinum(2+), diaqua(1,2-cyclohexanediamine-N,N')-, dichloride, [SP-4-2-(cis)]- (9CI) (CA INDEX NAME)

●2 Cl<sup>-</sup>

RN 105471-16-7 CAPLUS

CN Platinum(1+), aquachloro(1,2-cyclohexanediamine-N,N')-, chloride, [SP-4-4-(cis)]- (9CI) (CA INDEX NAME)

● C1 -

IT 105428-94-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and nitration of)

RN 105428-94-2 CAPLUS

CN Platinum, dichloro(1,2-cyclohexane-4,5-t2-diamine-N,N')-, (SP-4-2)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} T & \begin{array}{c} H_2 & C1 \\ \end{array} \\ \begin{array}{c} Pt \\ \end{array} \\ NH_2 \end{array}$$

IT 66900-67-2P 105428-95-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with malonic acid)

RN 66900-67-2 CAPLUS

CN Platinum, [rel-(1R,2S)-1,2-cyclohexanediamine-.kappa.N,.kappa.N']bis(nitrato-.kappa.O)-, (SP-4-3)- (9CI) (CA INDEX NAME)

RN 105428-95-3 CAPLUS

CN Platinum, (1,2-cyclohexane-4,5-t2-diamine-N,N')bis(nitrato-O)-, (SP-4-2)- (9CI) (CA INDEX NAME)

IT 105428-96-4P

RN 105428-96-4 CAPLUS

CN Platinum, (1,2-cyclohexane-4,5-t2-diamine-N,N')[propanedioato(2-)-0,0']-, (SP-4-2)- (9CI) (CA INDEX NAME)

L30 ANSWER 36 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1980:483862 CAPLUS

DN 93:83862

TI Circular dichroism spectra of square planar complexes containing prochiral olefins and their stereoselective olefin exchange

AU Saito, Kazuo

CS Fac. Sci., Tohoku Univ., Sendai, 980, Japan

SO ACS Symposium Series (1980), 119(Stereochem. Opt. Act. Transition Met. Compd.), 91-114

CODEN: ACSMC8; ISSN: 0097-6156

DT. Journal

LA English

.eta.2-Olefins in square planar complexes of Pt(II) and Rh(I) give AB absorption peaks or shoulders in the regions from 20,000 to 30,000 cm-1 and .apprx.40,000 cm-1. Asym. coordinated olefins give CD peaks corresponding to these peaks; the S,S-configuration gives large neg. peaks in the latter region for both Pt(II) and Rh(I) complexes, whereas the CD sign in the former region depends on the central metal ion. In the region from 30,000 to 40,000 cm-1 the CD pattern depends on the variation in ligands other than the olefin. There seems to be a cis influence and also some perturbation from the asym. nitrogen trans to the olefin. Prochiral olefins in Pt(II) complexes of the types [PtCl3(olefin)] - and cis- and trans (N,//) - [PtCl(L-am) (olefin)] (L-am, L-aminocarboxylate) undergo inter-mol. olefin exchange with an excess of free olefin in org. solvents. Comparison of the rates of CD decrease and the isotopic exchange with labeled ligands exhibited significant stereoselectivity, retention of configuration being preferred to inversion. On the reaction of [PtCl(L-am)(ethylene)] with trans-2-butene (tbn) or 2-methyl-2-butene (mbn) appreciable induction of asymmetry was found in the product. kinetic and thermodn. optical yield were recorded sep. Kinetic selectivity seems to come from a steric factor, but perturbation from asym. N trans to ethylene seems to be responsible for the thermodn. selectivity.

IT 74453-85-3

RL: PRP (Properties)

(CD and UV absorption spectra of)

RN 74453-85-3 CAPLUS

CN Platinum(1+), (1,2-benzenediamine-N,N')chloro[(2,3-.eta.)-2-methyl-2-butene]-, stereoisomer, tetraphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 74453-84-2

CMF C11 H18 Cl N2 Pt

CCI CCS

CRN 4358-26-3 CMF C24 H20 B CCI CCS

$$\begin{array}{c|c}
\hline
C \\
\hline
C \\
B \\
\hline
C \\
\hline
C \\
\hline
\end{array}$$

L30 ANSWER 37 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1980:69275 CAPLUS

DN 92:69275

TI Distribution of platinum chemotherapeutic complexes in normal tissues and in tumors

AU Douple, Evan B.; Howden, Frederick M.; Hoeschele, James D.

CS Radiat. Ther. Dep., Dartmouth-Hitchcock Med. Cent., Hanover, NH, 03755, USA

SO International Journal of Radiation Oncology, Biology, Physics (1979), 5(8), 1387-91 CODEN: IOBPD3; ISSN: 0360-3016

DT Journal

LA English

GI

AB Levels of 195mPt-labeled malonato(-)-R,R-1,2-diaminocyclohexaneplatinum(II) (I) [61848-65-5] were measured in tissues of normal and brain tumor-bearing rats between 1 and 30 h after injection. Higher concns. of Pt were recorded in tissues of tumor-bearing rats compared to tissues of normal animals and in intracerebral brain tumors compared to normal brain. A peak of a secondary max. of uptake was obsd. at 24 h. Results predict that it should be possible to obtain levels of Pt in the brain tumors on the order of levels that produced enhanced radiation effects in previous studies using cultured mammalian cells.

IT 61848-65-5

RL: PROC (Process)

(uptake of, by brain tumor)

RN 61848-65-5 CAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-.kappa.N,.kappa.N'][propanedioat o(2-)-.kappa.O1,.kappa.O3]-, (SP-4-2)- (9CI) (CA INDEX NAME)

L30 ANSWER 38 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1978:182371 CAPLUS

DN 88:182371

TI Tissue distribution and excretion of sulfato trans(-)-1, 2-diaminocyclohexane platinum(II) Pt-195m in rats

AU Ridgway, Helen; Speer, Robert J.; Hall, Larry M.; Stewart, David P.; Newman, Andrew D.; Gennings, Ann; Zapata, Alba; Broom, Vicky; Hill, Joseph

CS Dep. Chem., Wadley Inst. Mol. Med., Dallas, TX, USA

SO Journal of Clinical Hematology and Oncology (1978), 8(1), 1-10 CODEN: JCHODP; ISSN: 0162-9360

DT Journal

LA English

AB In rats with transplanted s.c. Shay tumors, the 72-h tissue distribution (percent administered radioactivity/g tissue) of 195mPt-labeled sulfato trans-(-)-1,2-diaminocyclohexane platinum (II) (I) [ 62011-40-9] for kidney, liver, skeletal muscle, and tumor was 1.857, 0.0707, 0.258, and 0.389, resp. Within the same period, urinary and fecal excretion were 71.5 and 10.0%, resp. Low blood 195mPt levels indicated rapid clearance and/or metab. The radioactivity remaining in the blood was cellularly bound and did not appear to be available for transfer to other tissues. Because of its high urinary excretion rate, I may be valuable in treating urinary tract tumors.

IT 62011-40-9

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
 (metab. of, in neoplasia)

RN 62011-40-9 CAPLUS

CN Platinum, (1,2-cyclohexanediamine-N,N')[sulfato(2-)-O,O']-, [SP-4-2-(1R-trans)]- (9CI) (CA INDEX NAME)

L30 ANSWER 39 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1978:7538 CAPLUS

DN 88:7538

TI Interaction of cis platinum(II) compounds with poly(L-glutamate). A

doubly anchored spin-label and a doubly anchored chromophore-label

AU Chao, Yen Yau H.; Holtzer, Alfred; Mastin, Stephen H.

CS Dep. Chem., Washington Univ., St. Louis, MO, USA

SO Journal of the American Chemical Society (1977), 99(24), 8024-32 CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

The free-radical 4-amino-2,2,6,6-tetramethylpiperidinyl-1-oxy AB [14691-88-4] yields cis-Pt(ATMPO)2(NO3)2 [64716-94-5], which is used to label poly(L-glutamate) (I), poly(L-aspartate) (II), and poly(L-lysine) (III). Labeling occurs by displacement of nitrate by polymer side chains. EPR spectra of oriented films of labeled I are strongly anisotropic; several arguments suggest that the major cause is g anisotropy. Spectra of solns., in several solvents, of labeled I are also anisotropic and monitor the helix-coil transition and polymer aggregation. Since monofunctional, side-chain labels show only isotropic motions, Pt must be bifunctionally anchored to adjacent carboxylates, requiring the label to follow backbone segmental motions. With shorter side chains (II) adjacent double anchoring is impossible; with longer side chains (III), flexibility reduces coupling to backbone motion; in each, therefore, spectra are isotropic. Chromophoric compds., particularly cis-Pt(bipy)(H2O)2][NO3]2 [64800-95-9], are similarly used. Bifunctional attachment is evidenced by the absence of base-induced UV spectral shifts (characteristic of attachment of OH- to Pt) shown by label alone, and by similarity of the spectra of labeled polymer and labeled oxalate. Induced CD appears for .alpha. helix in the region of the chromophore .pi.-.pi.\* bands; transition to random coil drastically reduces this CD. With extensively labeled polymer differences in the course of the helix-coil transition as monitored by CD in the backbone region with that monitored in the chromophore region show that the label stabilizes its attached helical residue. A study of Corey-Pauling-Koltun models and extant theories suggests that the induced CD arises by coupling of the carboxylate .pi.-.pi.\* and the bound chromophore 1B1 elec. transition moments.

IT 64738-77-8D, reaction products with poly(glutamic acid)
RL: PRP (Properties)

(CD spectra of, chain segmental motion in relation to)

RN 64738-77-8 CAPLUS

CN Platinum(2+), diaqua(1,10-phenanthroline-N1,N10)-, (SP-4-2)-, dinitrate (9CI) (CA INDEX NAME)

CM 1

CRN 64738-76-7

CMF C12 H12 N2 O2 Pt

CCI CCS

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09567863
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CM 2

CRN 14797-55-8

CMF N O3

IT 64738-77-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(prepn. and reaction with poly(glutamic acid))

RN 64738-77-8 CAPLUS

CN Platinum(2+), diaqua(1,10-phenanthroline-N1,N10)-, (SP-4-2)-, dinitrate (9CI) (CA INDEX NAME)

CM 1

CRN 64738-76-7

CMF C12 H12 N2 O2 Pt

CCI CCS

$$\begin{array}{c|c} & & \\ & N & \\ &$$

CM 2

CRN 14797-55-8

CMF N O3

IT 64738-79-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with silver nitrate)

RN 64738-79-0 CAPLUS

CN Platinum(2+), diaqua(1,10-phenanthroline-N1,N10)-, dichloride, (SP-4-2)(9CI) (CA INDEX NAME)

●2 C1 -

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